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E AND REVELATION HARMONIOUS:

A

E OF SCRIPTURAL TRUTHS ASSAILED IN

IR GEORGE COMBE'S WORK

ON

NSTITUTION OF MAN, CONSIDERED IN RELATION TO EXTERNAL OBJECTS."

BY C. J. KENNEDY,
PAISLEY.

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ADVERTISEMENT.

THIS Work appears, as the title-page intimates, under the auspices of an Association which was formed in Edinburgh in 1845, for opposing prevalent errors in religion. The design of the Institution, which consists of ministers and laymen connected with various denominations holding evangelical sentiments, is to keep a vigilant eye on the efforts which may be made in this country to diffuse opinions at variance with scriptural christianity, whether these take the form of superstition or scepticism. There are not wanting facts to show, that if the current of opinion among a large portion of the population of this country has been of late tending towards infidelity, there is a reaction among another class—a powerful under-current, flowing towards superstition. The rapid spread of Anglo-Catholicism within the last few years, proves that the antiquated absurdities of a bygone age are not too gross to revive and grow beneath the shade of so-called protestant institutions, and amid the light and intelligence of the nineteenth century. The incessant and gigantic efforts of Rome to re-establish her ascendancy, together with the success which has, in too many instances, attended her ambitious schemes, call upon every friend of Bible truth and of liberty of conscience, to oppose the spread of popish influence: while the tendency of multitudes to seize with avidity every theory which may be broached by the votaries of infidelity, how crude soever the sophistries by which it is defended, points to the necessity that there is for Christians to bestir themselves in protecting the unstable against the sceptical views into which they are in danger of being beguiled. The above mentioned Association seeks, in reference to these diverse, yet connected forms of error, to adapt itself to the exigencies of the times.

The object of the following pages is not to oppose the principles of Phrenology, but to examine and refute certain doctrines ostensibly founded by Mr Combe on phrenology and the "natural laws." The philosophy taught in the "Constitution of Man," is, in certain of its leading prin-

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INTRODUCTION.

SCIENCE and religion must be really harmonious. No one truth can contradict any other truth. There may be apparent contradiction; real contradiction there never can be. How *could* sound science contradict Divine revelation? The Bible, when correctly interpreted, cannot disagree either with the facts of geology, the facts of phrenology, or the other facts of physiology.

We may interpret the Holy Scriptures inaccurately. The philosopher may err in reference to his facts. In this manner, incompatible conclusions may be drawn by the respective parties. Hence there may arise fierce contentions, each party regarding the other as hostile to truth. Such contentions, however, are only the results of our ignorance. Let the disputants carefully re-examine both their data and their deductions; instead of striving to magnify, let them strive to remove the vexatious discrepancies. When each obtains a thorough knowledge of his own department, and correctly apprehends the opinions of his former opponents, conflict will be succeeded by amity among the votaries of theology and the

votaries of physical science. Since much of the abounding infidelity and ignorance of the present day may be rightly ascribed to such contentions, it is exceedingly desirable that they be speedily terminated. This, however, cannot be effected by a pusillanimous suppression or an unprincipled sacrifice of truth on either side; but it may, by candid examination and extended information, on both sides. Both parties have been to blame as to occasioning variance. Some theologians, and some philosophers also, have seemed eager to force religion and science into the position of antagonism. They deprecate the unnatural war, and yet they persist in those measures which tend to its perpetuation.

It is with deep regret that we charge Mr George Combe with being guilty of this fault.

In his work on "The Constitution of Man considered in relation to External Objects," he has put forth and advocated, in various instances, speculations which are distinctly opposed to the plain statements of the Bible. His book contains much that is unobjectionable, much that is highly valuable,—not a little that the Christian may read with advantage. In consequence of this, the unwary are in great danger of receiving *all* his views as if they were accurate. The evident good so occupies their attention, as to prevent their suspecting the existence of the latent evil. Our object, in this tract, is to furnish a suitable antidote to what we deem to be dangerous in that elaborate and popular work.

Against the sentiments of Mr Combe we shall urge no captious objections, but shall willingly admit what we think we can admit with safety,

and gladly approve what appears to us worthy of approbation.

The topics introduced by Mr Combe in the progress of his work are numerous and varied. A large proportion of them have no necessary connexion with his peculiar views, and therefore may be left unnoticed. Of the topics that remain, a considerable number are, in substance, mere varieties or duplicates of each other. A specimen case—the case that seems to possess the greatest measure of pertinence and force—will generally be sufficient to dispose of the entire class in which it is included. Though the limits within which our observations must be confined—narrow, when compared with the extent of Mr Combe's work — will oblige us to omit much on which we could wish to dilate, yet no topic necessarily connected with the points at issue, will be passed over without notice.

Among other things, Mr Combe labours to prove that the world has within itself the elements of improvement, which time will evolve and bring to maturity; that man, when created, was liable to death; that man had at his creation the very same dispositions and tendencies that he has now; that prayer is advantageous only by improving our own minds, thus qualifying us to receive what we ask; that supernatural influences transforming the character are not to be expected; that all human suffering is punishment consequent on disobedience to the "Natural laws;" that human character is to be improved chiefly by observing the "Natural Laws;" that there are some tribes of human beings who cannot, with their present cerebral development, adopt

christianity; and that phrenology is an indispensable guide of human conduct.

These topics have been so mixed up with each other by Mr Combe that it is no easy matter to disentangle them. As it is not our design to advert to all the matters that he has introduced, we shall take them up in that order which seems the most easy and natural, without attending very scrupulously to regularity of succession.

We shall not appeal to the holy Scriptures alone for the purpose of deciding the points at issue. We shall need to cite Scripture passages for the purpose of showing what the views which it exhibits really are, just as we shall need to cite passages from Mr Combe's work for the purpose of showing what his views really are; but we shall not quote texts of Scripture *as arguments which preclude scientific inquiry*. We shall appeal to recognised facts and phenomena. On these we shall rely as the chief, though not always the only evidence that we have to adduce. An appeal to the Bible would at once decide the whole case against Mr Combe. But he declines the appeal. He demands other proof. He says expressly, — "If the views of human nature expounded in this work be untrue, the proper answer to them is a demonstration of their falsity." "If they be true, they are mere enunciations of the institutions of the Creator; and it argues superstitious, and not religious feelings, to fear evil consequences from the knowledge of what Divine Wisdom has appointed. The argument, that the results of the doctrine are obviously at variance with Scripture, and that therefore the doctrines cannot be true, is inadmissible,

for, in the words of Dr Whately, if we really are convinced of the truth of Scripture, and consequently of the falsity of any theory (of the earth for instance) which is really at variance with it, we must needs believe that that theory is also at variance with observable phenomena; and we ought not, therefore, to shrink from trying the question by an appeal to these."*

With all due deference to this high authority, we maintain that, if Mr Combe's doctrines are really at variance with Scripture, and if we are really convinced of the truth of Scripture, we must conclude that Mr Combe's doctrines are false. The reasoning is so obviously fair, that we have no fear to exhibit it, either to Mr Combe or to the great logician whom he quotes. It stands thus:—

What is really at variance with Scripture cannot be true;

Mr Combe's theory of the world is really at variance with Scripture;

Therefore, Mr Combe's theory of the world cannot be true.

If Mr Combe admit these premises, he will find it impossible to escape from this conclusion. Why, then, should the argument be inadmissible? It is obviously both admissible and legitimate. In this way, many believers in the Bible will summarily settle the whole affair. They are entitled to require from Mr Combe, that he either conform his speculations on the world, and human nature to Scripture—abandoning every doctrine that really is at variance with Scripture; or else

* Constitution of Man, People's Edition, 1836, page 89. It is the People's Edition that we quote in this tract.

come forth and demonstrate the falsity of Scripture —overthrowing all the evidence on which its claims to divinity and truth have hitherto been based. Those who implicitly adopt the views of Mr Combe, may be disposed to use the converse of the preceding argument. Believing the truth of Mr Combe's theory of the world, they will, of course, believe that what is at variance with that theory cannot be true. Such persons may argue thus:—

What is at variance with Mr Combe's theory of the world cannot be true;

The Bible is at variance with that theory;

Therefore the Bible cannot be true.

Some do argue in this very manner, and arrive at this very conclusion. It is of no use to blink this undeniable fact. We do not object, for our part, either to the admissibility or to the legitimacy of the argument. We mean that there is no fault in its logical construction. If the premises were admitted, the conclusion could not be denied. We regard the conclusion as utterly false; but we do so, only because we are fully satisfied that the premises are false.

On this point, it is highly proper that there be no mistake. If, in order to his reception of Mr Combe's system, the believer in the Bible must cease to believe that book, he ought to know this,—not that his mind may be blinded by prejudice, but that, if necessary, he may attentively re-examine the foundations on which his faith is built, and may give to Mr Combe's pleadings that awakened and sustained attention, which the matters at issue between him and Christians so richly deserve.

Satisfied as we abundantly are, from ample and diversified evidence carefully examined, that the Bible is true, we are also satisfied, that whatever in Mr Combe's theory of the world is at variance with the Bible—must be false. Here we are entitled to rest; for the evidence by which the truth of the Bible is supported never can be overthrown. The plain Christian who has, after a proper scrutiny, adopted the conviction that the Bible is true, and who may neither have the leisure nor the means of fairly examining the theory and the reasonings of Mr Combe, acts quite rationally in resting here. He stands on the adamantine rock of eternal truth. And it may be that he is justified in declining to engage in the reading of Mr Combe's book. Other matters more necessary and urgent may, for the present, occupy all his time and thoughts. He may thus be perfectly justified in declining to read either this tract or Mr Combe's treatise. As for us, however, we do not *confine* ourselves to the authority of Scripture; we do not shrink from trying the question by an appeal to the phenomena on which Mr Combe's system is founded.

There may be numerous phenomena which would, if known, greatly facilitate our task. The subject is vast, and we can examine only a small portion of the admissible data. We nevertheless enter on the investigation without fear. We are convinced that our positions are strong. But even were we overthrown, our cause would not be lost through our defeat. There are still impregnable positions left behind those which we are about to occupy. Thither

the defenders of biblical truth could with ease betake themselves, and, in perfect safety, smile at all the attempts that might be made by their opponents to effect their dislodgement or their overthrow.

NATURE AND REVELATION HARMONIOUS.

CHAPTER I.

DEVELOPMENT OF INHERENT ELEMENTS OF IMPROVEMENT.

ONE of Mr Combe's fundamental principles is, that the world contains within itself the elements of improvement, which time will evolve and bring to maturity.

This position will first demand our attention. Mr Combe applies it both to the physical and the moral departments of the world. We shall first quote his data, and then examine his deductions.

Let us look at his data.

"The constitution of this world," says Mr Combe, "does not look like a system of optimism. It appears to be arranged in all its departments, on the principle of slow and progressive improvement. Physical nature itself has undergone many revolutions, and apparently has constantly advanced. Geology seems to show a distinct preparation of it for successive orders of living beings, rising higher and higher in the scale of intelligence, until man appeared."

We grant that this world does not now look like a system of optimism—a perfect system—though it forms part of a system of optimism. It looks like a system of optimism marred or deranged, or, at least, impeded in its evolution. It looks like what the Bible represents it to be—a world in which temporary disorder prevails—a world in which good and evil mingle—a world once blessed, but afterwards cursed, and to be eventually relieved from the curse. It is a world full both of order and disorder, beauty and deformity, health and disease, safety and danger, wealth and poverty, joy and sorrow, pleasure and pain, life and death.

It would be a very strange dwelling-place for a race of beings morally perfect; but it is quite fit for such beings as we actually are. The abode should correspond to the inhabitants. Hence, the physical evils that abound may be all proper and requisite; consistent, not only with the awful justice, but also with the perfect wisdom and boundless benevolence of the Deity.

They may all be useful parts in a system which, notwithstanding temporary appearances to the contrary, is a system of optimism, including the entire universe, and the whole range of the coming eternity, in its amazing compass.

Labour is the lot of man: but labour has its joys as well as its fatigues. In a proper state of human society, the labour requisite from each individual would not be oppressive. It would leave abundant leisure for rational recreation and mental culture. Pain is hard to bear; but unavoidable pain may and ought to become the occasion of moral improvement. Each hour of

anguish may thus become the means of securing, through the benevolence of the All-wise Ruler of the universe, and through his stupendous plan of mercy, executed by the Mediator, an amount of felicity, not barely equivalent to itself, in compensation, but inconceivably greater. Danger is fitted to incite us to seek the divine favour and protection, through which we may escape from every evil.

Viewed apart from the actual condition, the moral discipline, and the eternal prospects of man, this world is a puzzle; viewed in connexion with these, the perplexity and obscurity are resolved and dissipated.

In the structure and arrangement of the external world, the proofs of boundless power, wisdom, and goodness which are presented every where to our view, evince it to be the work of an All-perfect Being.

There are evils in the world which it would be both unreasonable and impious to trace to such a Being as their origin. For the introduction of these evils, the Bible assigns a cause. It supplies us with an explanation of difficulties otherwise quite inexplicable. This explanation is partial only, not complete; but it dissipates much of the obscurity with which the origin and condition, both of the world and its inhabitants, were invested. It accounts for so many of the mysterious facts presented in the history of man, as to furnish reasonable grounds for believing that the facts which it leaves unexplained are all really consistent with a scheme of perfect wisdom and benevolence—a scheme of inconceivable extent, and to us of inextricable complexity—a scheme

progressively evolved, and requiring for its complete evolution, and full realization, so vast a duration, that it baffles the human imagination when attempting, by its strongest efforts, to soar onwards to its close.

Let us return to the statements put forth by Mr Combe:—"Physical nature itself," says he, "has undergone many revolutions, and apparently has constantly advanced. Geology seems to show a distinct preparation of it for successive orders of living beings, rising higher and higher in the scale of intelligence and organization, till man appeared."

Now we must bear in mind that this is adduced to prove, that the world contains *within itself* the elements of improvement, which time will evolve and bring to maturity. The point to be proved, is not that the world has already been improved by successive changes, but that these changes have been the results of the *elements of improvement contained within the world itself*, which time has been evolving. The point to be proved is, that the world has improved in consequence of the evolution of *its own* energies. But are we compelled, by irresistible evidence, to admit the truth of Mr Combe's allegation? Do the phenomena to which he refers establish his position? If we grant that physical nature has undergone many revolutions, and has constantly advanced, must we also grant that these revolutions have been simply the results of its own energies, of the evolution of elements of improvement contained within itself? By no means. May not creative power have repeatedly interfered to bring about the successive improve-

ments, that seem to have taken place in physical nature? Is not this at least supposable? If it is even supposable, then Mr Combe's hypothesis *may* be false. We may admit his statement, but reject his explanation of the facts alleged.

Were we to admit the facts as stated by Mr Combe, still they would prove nothing; for they agree, at least as well, with the position that they are to be traced to creative power repeatedly put forth, as with the position that they are to be traced solely to the evolution of the elements of improvement contained within physical nature itself. Thus the foundation on which Mr Combe attempts to build his fabric is entirely insecure.

We are entitled, however, to assume higher ground;—we are entitled to assert that the phenomena agree *better* with the explanation, which refers them in part to creative energy, put forth repeatedly, than with that which ascribes them wholly to the evolution of physical energies.

Before producing our title to assume this higher ground, however, it is but right to advert to the fact, that even Mr Combe's hypothesis requires the employment of creative power and skill. We do so, that no injustice may be done either to him or to the subject. Regarding the view which he advocates, he says, "This hypothesis ascribes to the power and wisdom of the Divine Being the whole phenomena which nature, animate and inanimate, exhibits; because, in conferring on each the specific qualities and constitution which belong to it, and in placing it in the circumstances in which it is found, He is assumed to have designed from the first, the whole results

which these qualities, constitution, and circumstances are calculated in time to produce."

Here we have Divine agency recognised. That such agency is indispensable is admitted. It must be had recourse to *somewhere*. The point in dispute is the *where*,—the place that is to be assigned to this agency. Is it *only* at the commencement of the entire series of causes that operate in the universe? Or is it both at the commencement and at other parts of this stupendous chain? If we are to decide this point by an appeal to the facts of geology, we must appeal to the entire mass of those facts,—so far as we know and can apply them,—not to a few isolated facts selected to serve a specific purpose, to support a favourite hypothesis. We must dare to look at the whole discovered evidence. We must hear the witnesses patiently, before we decide the case. To ascertain whether creative power is put forth at a given era, we must interrogate the intelligible phenomena belonging to that era. We must receive the recorded testimony that lies inscribed before us. Mr Combe having cited his witnesses, brings them forth to establish his case. Possibly what they say may be sufficient to make out ours. If so, we may save the time, and spare the patience of our readers, by resting our arguments chiefly on the testimony cited by him, leaving out much that might be adduced in favour of our own view from other quarters. Let us attend to the statements on which Mr Combe builds his hypothesis.

"The globe in the first state, in which the imagination can venture to consider it," says Sir

H. Davy, " appears to have been a fluid mass, with an immense atmosphere revolving in space round the sun. By its cooling, a portion of its atmosphere was probably condensed into water, which occupied a part of its surface. In this state, no forms of life, such as now belong to our system, could have inhabited it."

Here we find much that is hypothetical,—much that we might be fairly entitled to question. But, supposing all this to be correct, one conclusion is quite legitimately drawn from the data assumed, namely:—That in this state of the globe no forms of life, such as now belong to our system could have inhabited it. As yet, life was not. Boiling waters and burning ground were quite incompatible with life. Molten granite, from whose surface all the materials which enter into the composition of living bodies would have been thrown off in vapour, had been cooled down, it is supposed, at the exterior parts; but it is also supposed that the heat was still too intense to admit the existence of animal life, in such forms as we now see in the world around us. All the forms of life, therefore, were yet to be originated. They necessarily belong to a subsequent era. This hypothesis, whatever may be its defects, annihilates the atheistic notion of an Eternal Series of living beings. An incandescent world was no place for beings whose corporeal structure must have been instantly dissolved and dissipated by the intense heat that then every where prevailed around them. Creative power must therefore have a place, not only at the commencement, but also during the progress of the mundane system.

Let us continue our examination of Mr Combe's evidence.

"The crystalline rocks, or, as they are called by geologists, the primary rocks, which contain no vestiges of a former order of things, were the result of the first consolidation on its surface. Upon the further cooling, the water which more or less had covered it, contracted; depositions took place, shell fish and coral insects were created, and began their labours." Here *creation* is admitted, distinctly admitted. How could it be denied? What but creative power and skill could produce the simplest shell fish or coralline? Inanimate matter may assume new forms; changes in temperature may reduce aeriform matter to liquids, and liquids to solids; crystalline rocks may be disintegrated, and their materials may be recomposed, so as to form rocks of a different class. All this may result from the operation of mechanical or chemical causes whose existence is known, and whose influence may be ascertained; but life is neither a mechanical nor a chemical phenomenon. It is an object of a different class, and must be traced to a different origin. Chemical or mechanical causes may occasion the extinction of life. This they often do; but they never produce life. The living being, in its humblest modifications, possesses functions, and performs operations, which no mechanism, no chemistry can explain. In animal structures, we see the most admirable adaptation of mechanical contrivance to the maintenance and exercise of living functions and acts. In them we likewise see the harmonious play of the most wonderful chemical agencies. But we

see something more; something far superior; something which demands for its production the intervention of the Creator to superinduce it on the mechanism and the chemistry which such structures embody and combine. Living substances have qualities which raise them above that complete subjection to mechanical and chemical forces which we see in the various forms of inorganic matter. They resist decomposition; they exhibit remarkable diversities in their temperature; when the temperature of surrounding objects sinks, their temperature does not sink to the same extent; they possess, in various degrees, the power of self-restoration,—a power that belongs not to inanimate bodies. If to these we add sensation and voluntary motion, which all animals possess, it will clearly appear that life includes what no causes purely mechanical can fairly explain. There is thus a wide interval between the simplest animal and the highest class of inorganic substances. Creative power is necessary for effecting the vast transition. We refer, not to the *continuation* of the species, but to their *original production*,—to the formation of the first individuals belonging to the species. We fearlessly maintain, that causes merely mechanical or chemical could not originate their structure or communicate to them living powers. Be it observed, that the animals of the primordial era, though undoubtedly low in the scale of organised being, still were "perfect animals, as perfectly adapted to the condition of things under which they had to live as those now existing."*

* Rudiments of Geology, by David Page. Chambers's Educational Course, p. 84.

They appear to have been chiefly zoophytes, mollusca, and crustacea. Take a shell-fish, or one of the class which would seem to have been among the earliest forms of life. In its structure we have most striking proofs of designing intelligence. If it is of the univalve class, how wisely is its arched or convoluted shell fitted to protect the animal from injury! If it is a bivalve, we have in the mechanism of its hinge and the form of its edges, convincing evidence of the same wise and benevolent design. Then we have the mysterious chemistry by which the animal has the power of abstracting from the waters, appropriating to itself, and secreting from its body, the calcareous matter which forms its shell. In addition, we have its organs and powers of sensation —its voluntary motions—the apparatus necessary for its nourishment, growth, and reproduction. These comprise a combination of phenomena, so extensive, so varied, so complex, so harmonious, so perfectly adapted to the circumstances of the animal, that nothing but mental imbecility or blind perversity could ascribe their origin to any other cause than creative intelligence, power, and benevolence.

Or take one of the corals. In it, in addition to all that we have noted in the case of the shell-fish, we have its labours, which, insignificant as they may appear to the superficial thinker, form part of a stupendous and magnificent plan, which is as yet only developed in part—which includes the eventual formation of new abodes suited to the highest classes of terrestrial beings.

In each animal we have a complete system of creative arrangements. In the combined opera-

tion of their united influences, we may see the vestiges of an all-comprising plan, including within its stupendous range numerous successive eras and multiplied concatenated worlds. To such a plan successive evolution is essential. But what is the mode of evolution? Here we would check our presumption, and tread with awe as on holy ground—with awe, and yet with firmness; for the light that guides our steps is clear—the voice that calls us to proceed is distinct. Entering the depository of archaic forms, we see inscribed on all the objects that lie scattered in profusion before us, this legend—"The hand that made us is divine."

CHAPTER II.

THE SAME SUBJECT CONTINUED.

We return to the citations adduced by Mr Combe:

"Islands appeared in the midst of the ocean raised from the deep by the productive energies of millions of zoophytes. These islands became covered with vegetables fitted to bear a high temperature, such as palms, and various species of plants, similar to those which now exist in the hottest parts of the world. The submarine rocks of these new formations of land became covered with aquatic vegetables, on which various species of shell-fish and common fishes, found their nourishment."

"Islands appeared in the midst of the ocean raised from the deep by the productive energies of millions of zoophytes."

What was the origin of those zoophytes? How came the first of them into being? What gave their productive energies to those labouring millions? What conferred on them the power to secrete and to cement those calcareous materials which compose the massive walls and embankments that were eventually to be surmounted by the terraces formed for bearing the fruitful and beauteous palm tree? What mind directed the tiny architects in their useful labours? Did they themselves contemplate the happy results of their humble, persevering efforts? Most assuredly

they did not,—they could not. Supreme intelligence doubtless directed them. Who that is not willingly blind can fail to see here impressive evidence that the christian poet uttered truth when he sung,—

"There lives and works
A soul in all things, and that soul is—God."*

"These islands became covered with vegetables fitted to bear a high temperature." How was this? How came even one vegetable type, the first of any one vegetable species, into being? Did the mouldering coral, or the broken shells, or the mingling fragments of dead and decaying crustacea, or the particles of disintegrated granite, pass spontaneously into vegetables? Had the lime of the shells and corals,—had the quartz, or the felspar, or the mica of the granite, some innate powers—some inherent elements of improvement, in virtue of which, when evolved and matured by time, its inert, unorganised particles arranged themselves so as to form a palm tree, with its roots, stem, leaves, flowers, and fruit? The word "tree" is soon uttered; but there is conveyed by that little, easy word, a combination of ideas, which it would require no little time to unfold and illustrate. Think of a palm. Think of its strong and tortuous roots clinging for stability round the massive rock, and sending its fibrous prolongations through the adjacent soil in search of nutriment. Think of the multiplied series of fibres and tubes by which this tree, perhaps for ages, draws nourishment from the earth. Think of the process of assimilation by

* Cowper.

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which this nutriment, and that also which it derives from the air in which it waves its leaf-crowned summit, is added to the original stem. Think of its bark, so well fitted to protect the gigantic plant from injury. Think of its leaves, their delicate fibrils, so finely ramified,—their inhalant and exhalant pores, so well adapted to receive and retain what the plant needs, and to emit what the plant needs not. Think of the mysterious chemistry by which the leaves decompose the carbonic acid gas which they inhale, appropriating the carbon, which nourishes the tree, and rejecting the oxygen, which animals require. Think of the blossom, whose very tints are adapted to the light and warmth of the particular region which is the appropriate *habitat* of the tree. Think of the various parts of fructification—the calyx, the stamens, the pistils, with their anthers, and pollen, and stigma. Think of the fruit, with its rind or other means of defence and preservation. Think of its reproductive power—so wonderful, so complicated, so complete. Think of the relations which the tree bears to the soil from which it grows—to the air, which moves and nourishes it—to the sun, which quickens it into life—to the rains, by which it is refreshed,—to the very earth itself, to whose magnitude and corresponding attractive force, the strength of its trunk, branches, twigs, and leaves, must all bear some correspondence, that the danger of its being readily broken by its own weight may be removed. Think of all these—and it would be easy to swell the amount of such particulars—think of all these things, none of which is imaginary, and then let us say whether

such an object as a palm tree could be originated by the elements of improvement contained within the disintegrating mineral substances, the waters, or the air of the primordial eras, without the aid of creative power and wisdom put forth at the period when such organised substances were first produced. Surely the finger of God was there.

Nor was it palms alone that then sprung from the new formed land. One class of causes acting in the same circumstances, might be expected to produce one single class of results. The geologist who would exclude from his list of productive agencies, the renewed exertion of creative power, has not only to account, by means of his meagre supply of admitted causes, for the original formation of palms, but also for the formation—the first formation, at that time—of "various species of plants similar to those which now exist in the hottest parts of the world." These, springing from the same soil, refreshed by the same rain, fanned or agitated by the same winds, pervaded and excited by the same electric powers, affected by the same solar light and heat, notwithstanding present great diversity in their size, form, qualities, and productions.

It is easy to see that diversities such as these, may result from original diversities in the structure and constitution of vegetables, both taking their rise from the intelligent and benevolent *forming* power of the Author of Nature, put forth on each primordial vegetable *at its creation*. But it would be the height of absurdity to ascribe such happy and beneficial—such strange and extensive diversities to the *uniform* operation of the *same* class of unconscious, unintelligent causes. Unless

we wilfully shut our eyes, we must admit that there are exhibited in these vegetable productions, unequivocal proofs of divine power, put forth *at the era of their original formation*—an era subsequent to that when matter was created.

The illustrious author of the quotation adds:—"The submarine rocks of these new formations of land, became covered with aquatic vegetables." We ask, how came these rocks to be covered with such vegetables? They form a very remarkable class. Their strong and elastic stems and leaves fit them for enduring rough tossing on the shore. Their porous structure, and their air-cells, enable them to float. We again ask, why this diversity of structure? Did the aqueous or the saline substances which surrounded the aquatic plants, originate their air-cells, or occasion their superior strength?

By divine intelligence and power giving them, at their original formation, a constitution suitable to their localities, we can easily account for their characteristic features. Without having recourse to divine formative agency, *then in activity*, and producing arrangements which causes purely mechanical, or purely chemical, could not produce, we do not see how the alleged phenomena can be explained.

But we must return to our citation. "The submarine rocks of these new formations of land, became covered with aquatic vegetables, *on which* various species of shell-fish, and common fishes, *found their nourishment.*"

Here there opens to our view a new and important adaptation—that of one class of organised existences to another—of the aquatic plants to the

aquatic animals. In this adaptation, various particulars are necessarily involved. 1. That the plant contain certain elements which also enter into the composition of the body of the animal which feeds upon it. 2. That the plant contain nothing that has any very injurious effect upon that animal, when received into its alimentary organs. 3. That the alimentary organs of the animal be able to digest the plant that is to prepare its elements for being subjected to the assimilative process. 4. That the animal have a relish for the plant. 5. That the animal be able to reach it. 6. That the animal be able to eat it, which implies the power of breaking it off, chewing or comminuting, and then swallowing it. These, and perhaps other things, are all requisite, in order to an animal's feeding on a plant. They imply a considerable number of independent, separate conformities. Now, what we have to ask is, did the qualities and powers *originally* given by the Creator to the *chemical* materials of the globe, include, as the acorn may be said to include the oak, the power of forming the original types of plants and animals (that is, the first of each sort), *and also* the power of adapting the former to the support of the latter? Was all this the mere result of the successive evolution of inherent elements of improvement conferred on the dead, unconscious, unintelligent materials of our globe, when its densest substances were yet in the state of igneous fusion? If not, it is plain that successive interferences by the Creator were necessary, in order to the production of the various forms of organisation which distinguish the archaic eras that the geologist labours to explore. Every

period when new races of vegetables, or of animals, were brought into being, must have been a period when *creative* power was again put forth. We speak not of those varieties, or subordinate varieties, that may reasonably be supposed to have been derived from some pre-existing species. We speak of genera perfectly distinct. We speak of races that could neither have been derived from each other, nor from any common predecessors. The production of such new races must have been, in every instance, a real *creation*, not a mere development.

We again return to Mr Combe's citation from Sir Humphrey Davy:—"As the temperature of the globe became lower, species of the oviparous reptiles appear *to have been created* to inhabit it; and the turtle, crocodile, and various gigantic animals of the saurian (lizard) kind seem to have haunted the bays and waters of the primitive lands."

Here is another *creation*.

This is no evolution of elements of improvement pre-existent either in the inorganic materials of the terraque-aerial globe, or in its animals, which were only shell-fish, zoophytes, crustacea, and fishes. Indeed, if we may rely on the deductions of very eminent geologists, long eras intervened between those which are here mentioned in immediate succession. According to them, most, if not all of the previously mentioned species had become extinct before the appearance of the saurians, the oviparous reptiles, the crocodiles, and the turtles, to which Sir H. Davy refers. These could not be the descendants of the small shell-fish, the coral animals, or the common fishes

of the previously mentioned geological periods. They were doubtless a new creation. They mark another era of the Creator's intervention.

Once again we return to the quotation:—

"But in this state of things, there appears to have been no order of events similar to the present. Immense volcanic explosions seem to have taken place, accompanied by elevations and depressions of the globe, producing mountains, and causing new and extensive depositions from the primitive ocean. The remains of living beings, plants, fishes, birds, and oviparous reptiles, are found in the strata of rocks, which are the monuments and evidence of these changes. When these revolutions became less frequent, and the globe became still more cooled, and inequalities of temperature were established by means of the mountain chains, more perfect animals became its inhabitants, such as the mammoth, megalonix, megatherium, and gigantic hyæna, many of which have become extinct."

The changes here referred to are not to be traced to progressive development, but, on the contrary, to successive creations of new races. This is the conclusion drawn by the illustrious Cuvier. The same conclusion is drawn by one of the most eminent geologists of the present day, Richard Owen, Esq. After a most extensive and elaborate examination of British fossil reptiles, which is given in a Report to the British Association for the Advancement of Science, in 1841, he, in the following words, sums up the results of his investigations: "Thus, though a general progression may be discerned, the interruptions and faults, to use a geological phrase, *negative the*

notion, that the progression has been the result of SELF-DEVELOPING *energies* adequate to a transmutation of specific characters; but, on the contrary, support the conclusion, that the modifications of osteological structure, which characterise the extinct reptiles, were *originally* impressed upon them AT THEIR CREATION, and have been neither derived from improvement of a lower, nor lost by progressive development into a higher, type."* In conformity with this, he states, when speaking of the organic phenomena of primeval times, that "the closest investigation of these phenomena seems to *demonstrate*" that "they have been the result of *expressly created* and *successively introduced* species."†

Sir John Herschell has intimated, in the clearest manner, his conviction, that the hypothesis which assumes the progressive development of elements of improvement inherent in the world itself is unsupported by evidence. This will appear from the following passages extracted from the opening Discourse which he recently delivered to the British Association for the Advancement of Science, at Cambridge:—

"But without going into any subtleties, I may be allowed to suggest, that it is at least high time that philosophers, both physical and others, should come to some nearer agreement than appears to prevail as to the meaning they intend to convey in speaking of causes and causation. On the one hand, we are told that the grand object of physical inquiry is to explain the phenomena of nature by referring them to their *causes;* on the other, that

* Report for 1841, p. 202. † Ibid.

the inquiry into causes is altogether vain and futile, and that science has no concern but with the discovery of *laws*. Which of these is the truth? or are both views of the matter true on a different interpretation of the terms? Which ever view we may take, or which ever interpretation adopt, there is one thing certain, the extreme inconvenience of such a state of language.

"The evil I complain of becomes yet more grievous when the idea of *law* is brought so prominently forward as not merely to throw into the background that of *cause*, but almost to thrust it out of view altogether; and, if not to assume something approaching to the character of direct agency, at least to place itself in the position of a substitute for what mankind in general understand by *explanation:* as when we are told, for example, that the successive appearance of races of organised beings on earth, and their disappearance, to give place to others (which geology teaches us), is a result of some certain law of development, in virtue of which an unbroken chain of gradually exalted organisation from the crystal to the globule, and thence, through the successive stages of the polypus, the mollusc, the insect, the fish, the reptile, the bird, and the beast, up to the monkey and the man (nay, for aught we know, even to the angel), has been (or remains to be) evolved. Surely, when we hear such a theory, the natural human craving after *causes*, capable in some conceivable way of giving rise to such changes and transformations of organ and intellect —*causes why* the development at different parts of its progress should divaricate into different lines —*causes*, at all events, intermediate between the

steps of the development—becomes importunate. And when nothing is offered to satisfy this craving but loose and vague reference to *favourable circumstances* of climate, food, and general situation, which no experience has ever shown to convert one species into another, who is there who does not at once perceive that such a theory is in no respect more *explanatory* than that would be which simply asserted a miraculous intervention at every successive step of that unknown series of events, by which the earth has been alternately peopled and dispeopled of its denizens?"

Sir H. Davy adds, "Five successive races of plants, and four successive races of animals, appear *to have been created* and swept away by the physical revolutions of the globe, before the system of things became so permanent as to fit the world for man."

These races may have been swept away by the physical revolutions of the globe, but they could not be created by these revolutions. Probably, Sir Humphrey does not mean to say that they were created by them. He surely could not mean to make an assertion so evidently and utterly false. He can refer only to the destruction of these races by physical revolutions. And then we must have at least five *creative* eras—five eras, not of nature's development, but of God's interference—five eras when he put forth his power to improve the world, forming it after a new and superior *model*, before it assumed the aspect which it wore when man became its pure and happy inhabitant, "when the morning stars sang together, and all the sons of God shouted for joy."

CHAPTER III.

RECAPITULATION OF THE PRECEDING ARGUMENT—WITH ADDITIONAL REMARKS.

WE do not vouch for the perfect accuracy of the evidence which we have been examining. Mr Combe, however, having adduced it, is bound to admit its validity and its relevancy. Now, what does it go to prove? Not successive developments, but SUCCESSIVE CREATIONS. "Shell-fish and coral insects WERE CREATED." This was not at the formation of the globe, but after it had cooled down so far as to permit the formation of the crystalline rocks, and the existence of water in its liquid form. What next? "As the temperature of the globe became lower, species of the oviparous reptiles appear *to have been created* to inhabit it." The sum of the whole historic outline is this:—

"Five successive races of plants, and four successive races of animals appear *to have been created;* at last man *was created.*" Here we are told, not of natural energies progressively developed, but of creative power repeatedly put forth. This evidence gives no support to Mr Combe's hypothesis, viz. "that the physical department of the world *contains within itself* the elements of improvement;" but, on the contrary, it ascribes the successive improvement of the

world to successive creative acts, storing it with varied organic forms, at eras widely removed from each other. We have here *reiterated interferences* by the Deity, to roll back the tide of destruction, and call forth into being *new* forms of life, rising above each other in excellence, but at successive and remote eras, to occupy and adorn the still improving world.

To argue for successive development as Mr Combe does, is no more just than it would be in a Canadian Indian to argue, that the white man's dwelling contains within itself the elements of improvement; because, when it first arose near the forest, it was a rudely thatched wigwam; then appeared as a mud-plastered log-house; next, having been successively improved, became a convenient but rough building of stone, well roofed with tiles; and, last of all, presented the aspect of a splendid mansion, built of polished stone, and covered with a glittering metallic roof. Here there is improvement, successive improvement; but how absurd would it be to ascribe this improvement to the dwelling itself, as if, by a process of development like that which converts an acorn into an oak, the rude wigwam had been converted into a magnificent mansion. So far from containing within itself the elements of improvement, the dwelling contains within itself the elements of decay. It ever and anon needs to be repaired. Its improvement is entirely owing to extraneous, not to inherent, energy. Time developes in it no further excellence. Time, on the contrary, developes in it ever-growing defects. If entirely left to itself, it would make progress; but its progress would be towards ruin. Similar to the

progress of the white man's dwelling, is the progress of the world, according to the data which we have been examining. The world's Former has, at various times, restored and remodelled it, —adding to its beauty in a diversity of ways,— clothing it with verdure, and filling it with sentient inhabitants. To divine power and wisdom, not simply to the qualities with which God originally endowed it, are we to ascribe the successive improvements of the world, prior to the time when, by new acts of creative energy, He once more remodelled it in order to fit it for being the abode of man, his noblest sublunary creature.

The creations mentioned by Sir H. Davy must be understood as real and proper creations— supernatural works—works in which the Supreme employs his own formative power. Let us for a moment re-examine this important point, on which so much depends.

No organised structures could exist, while the now crystalline rocks were in the state of igneous fusion. A much lower degree of heat would suffice to convert all their proximate elements into vapour. Animals *now* spring from pre-existing animals. Vegetables also spring from pre-existing vegetables. Neither animal nor vegetable then existed. Chemical affinity cannot originate life; no cause, merely physical, can give rise to organic structure; no organic being ever originates a being of a different organic species; changes in temperature may cause solids to liquefy or liquids to congeal,—may vaporise liquids or liquefy vapours; chemical affinities may decompose compounds, and recompose their elements into new compounds; mechanical causes

may change the places and modify the structure of inorganic bodies; but, under all those forms which chemical or mechanical causes may make an inorganic body assume, it still remains an inorganic body. Take a piece of silver,—melt it; it is silver still: when it cools, it will become solid again; vaporise it, still it is silver,—let it cool, it will first become liquid, and then become solid again: it is silver still. Take a piece of marble or carbonate of lime; by heat you may expel the carbonic acid gas. What is left is lime. Suppose the oxygen abstracted from the lime, what is left is calcium. Calcium may be vaporised, or liquefied, or solidified; it is still calcium.

The oxygen may exist in the form of gas, or in combination with other bodies; it is still oxygen. However often combined or disengaged, it acquires no new quality, it loses no original one. The same is true of the carbon. The calcium, oxygen, and carbon, under all their known modifications, remain still calcium, oxygen, and carbon. Combined they may be, but their original qualities are neither annihilated nor altered, although the effect of those qualities may for a time be prevented. The power of the calcium to burn is prevented, when it exists in the state of lime or oxide of calcium. The power of the lime to corrode the skin is prevented, while it is combined with carbonic acid in the form of carbonate of lime; but whatever form the carbonate of lime or its elements may assume, they never, by the power of mechanical or chemical agencies, become alive,—they never acquire organic structure; under the operation of all such causes they still continue dead, destitute of the qualities by which

animals and vegetables are distinguished. A power extraneous to themselves, a power superior to those included in their original constitution, is requisite to convert such physical substances into organised structures, and to superinduce the mysterious thing called *Life*. The elements of material bodies are now known; their principal qualities have been ascertained; but it is contrary to all experience, and contrary to all analogy, to suppose that they possess the power of forming organised and living structures. Let all the physical inorganic bodies in the world act upon each other ever so long, we have no reason to think that organic structures would ever result from their action. Living structures, in their action, follow laws of their own,—laws to which there is nothing like in the known laws of physical action. Indeed, living structures act in various ways that are contradictory to the laws of physical action. Their growth is opposed to the nature of inorganic substances, which tend, on the contrary, to decay; their spontaneous motions are in opposition to the natural inactivity, the *vis inertiæ* of physical substances. These have no organisation, and accordingly can confer none. We therefore must arrive at the conclusion, that *creative* power was put forth in the formation of organised and living structures. This negatives Mr Combe's hypothesis of progressive development.

At the history of the organic department of the world we have glanced but slightly. What we have learned from this department, however, is altogether hostile to the hypothesis maintained by Mr Combe. The new genera of plants and animals which make their appearance at each

new geologic period, are evidently not such as can be ascribed to the development and improvement of pre-existing genera, but appear to have been new creations. Animals may alter to a certain extent, but that extent is limited. The ox cannot be transmuted into the horse, nor the dog into the sheep or goat; each race has its own permanent and indestructible characteristics. There is very much that locality, climate, food, and training, may effect. Man can greatly improve the breed of the domestic animals; but there is much that such modifying influences cannot effect. The Creator has set impassable limits to change among the animal races. HE has inscribed on each its own imperishable character. The mummies of animals deposited in the monumental structures of Egypt three thousand years ago, are found, after the most attentive and detailed examination, not to present the smallest difference from the animals of the same species which we now see. With respect to the extinct species of animals, whose remains are preserved in geological monuments, we have no evidence whatever that any one species was ever transmuted into another. On this point we have already cited that eminent geologist, Richard Owen, Esq. To his testimony we can add that of Baron Cuvier, and no higher authority on this subject could be cited, that "we have a right to conclude that the ancient and now extinct species were as permanent in their forms and characters as those which exist at present; or, at least, that the catastrophe which destroyed them did not leave sufficient time for the production of the changes, that are alleged to have taken place" by

certain philosophers, in their forms and organisation; and further, "that animals have certain fixed and indestructible characters which resist the effects of every kind of influence, whether proceeding from *natural causes* or human interference; and that we have not the smallest reason to suspect that *time* has any more effect upon them than climate."*

Thus, every animal race must have derived its origin from a distinct creative act performed by the Former of all things. The same is true regarding the vegetable tribes. They may be very extensively modified by climate, soil, and culture; but their modification is confined within fixed and impassable limits. Degeneracy, sterility, or extinction ensue, when attempts are made to modify them beyond those limits. Here, as in other instances, creative wisdom has interdicted presumptuous interference with its own benevolent plans.

Hence, each vegetable type retains its distinctive form; and thus the evidence of independent and separate vegetable creations is perpetuated in the world.

Here, then, we meet with strong proof, not in support of Mr Combe's hypothesis regarding the successive development of inherent energies, but in evident opposition to that hypothesis.

* Theory of the Earth, p. 122.

CHAPTER IV.

HARMONY BETWEEN GEOLOGY AND SCRIPTURE.

THE sacred books were not intended to teach physical science; theirs is a different province. But they are not hostile to physical science; they interdict no scientific investigation; their statements are brief; their own direct objects are kept steadily and constantly in view; they do not turn aside to interfere unnecessarily with the pursuits of the philosopher. By them, matters unconnected with human salvation are mentioned only incidentally, rather than directly and in detail; their language is rather popular, than *rigidly* philosophical. It was suited to the age when it was first employed, and to the capacity of the persons to whom it was originally addressed. Yet, properly understood and fairly interpreted, it will be found correct,—embodying no error, contradicting no truth, misrepresenting no fact,—whether mental, moral, or physical. It is such as was fitted to convey, regarding the topics on which it treats, the most correct conceptions that those to whom it was addressed were able to form, in the period and the position which they occupied. Some of its announcements also seem to have been intended to give obscure hints concerning important scientific facts, quite unsuspected at the time when such announcements were made.*

* See Gen. i. 6; Job xxvi. 7; xxviii. 5.

Regarding the origin of matter, the sacred writers distinctly assert the proper creation of it, *out of nothing*, by God.* At what time matter was created they do not inform us,—at least not in such a way that we can compare it with the times at which other events took place. Moses simply tells us, that "God created the heavens and the earth IN THE BEGINNING." *When* the "*beginning*" was he does not tell. However far back the geologist may find it requisite to place "the beginning," the Bible leaves him perfectly at liberty to do so. If he should demand millions of ages for the formation of the rocky strata which he discovers and explores, the Bible, while it does not give forth a statement that his claim is valid, states nothing that is really in opposition to its validity.—It is silent on the subject. Encouraging him to "prove all things, and hold fast that which is good," it leaves him "ample room and verge" to pursue his investigations unmolested. Between "the beginning," and the creative acts of the "first day," the Bible does not forbid the geologist to interpose as great an extent of duration as he ever can require. Nor are we obliged to refer the *creation* of light to the "first day," as has been maintained by most biblical critics. Each of the "six days" commenced with its "*evening*,"—its time of *mixing*, of *intermingling* light and darkness, as the original word, rendered "*evening*," plainly imports.† Light must have existed *before* there could be any such period

* Gen. i. 1; Heb. xi. 3.

† ערב from the verb ערב, to mix or mingle. See the original Hebrew of verses 5, 8, 13, 19, 23, 31, in Genesis, chap. i.

of intermingling light and darkness—of declining and evanishing brightness; that is, light must have been created before the "evening" which formed the commencement of the "first day." If this is denied, then it must be maintained, that though the same word is employed to denote the evening of the "first day," that is employed to denote the evening of each of the other five creative "days,"—yet it was a period of *an entirely different sort*—a time, not of intermingling light and darkness, but of darkness unmixed, total, and perfect. If this is denied, it will follow, that, while each of the other five "*evenings*" was a limited period, perhaps of short duration, the "evening" of the first day was unlimited—stretching away back into the antecedent eternity—into the inconceivable extent of the pre-mundane darkness. If this is denied, then the time of light in the first day was shorter than in the other six days, embracing only the duration of the first "*morning*,"—not both an "*evening*," and a "*morning*," like each of those other days.

What, then, it may be asked, was the work of the first day? We apprehend it was God's dividing the light from the darkness. This was a work of stupendous importance. The decline of the full light, issuing in evening, which "came on forerunning night,"—then night itself,—then the gradually brightening morning,—followed by the opening splendour of day,—these constituted the "first day." Thus the light was divided from the darkness. We pretend not to determine under what peculiar modifications light existed, during the era antecedent to the time when it was divided from the darkness. On that point

Scripture is silent. On that point we hazard no assertion. It is enough for us that light was then in existence. We leave to others the task of tracing the subject further. To return to the Mosaic record: It is worthy of remark, that the work of the "second day," is a work quite analogous to that which we assign to the "first day." It is a work of separation; it is another work of division. It is God's dividing the waters from the waters—the waters beneath the firmament from the waters above the firmament. How like the work which we assign to the "first day!" The work of each of the first two "days" is a work of division.

According to our view, the creation of light belonged to the archaic period—to some era, how remote we know not—anterior to the "evening" and "morning" which constituted the "first day." This admits the existence of vegetables and animals previous to the "first day" of the six to which Moses refers, and removes the plausible objections urged by Professor Moses Stuart against the deductions of modern geology. Light was necessary to both forms of organic being; and light there was, prior to the first Mosaic "day." Thus the geologic record and the sacred record are reconciled. On the one hand, the believer in geology is freed from a strong inducement to disbelieve the Bible; and, on the other, the believer in the Bible is enabled to admit, without scruple, the claims of a modest and cautious geologic system.

We can believe in the Bible and also in geology. We are under no necessity of maintaining what Professor Stuart argues that we

must maintain, viz. "Vegetation and animal life for ten thousand times ten thousand ages, without light, or heat, or air."* Geologists and theologians need not disagree. By carefully and cautiously interpreting the Scriptures on the one hand, and, on the other, by modestly interpreting the facts of geology, the respective inquirers will doubtless approach nearer and nearer to that complete agreement, which our present ignorance and error may view as unattainable. We cordially echo the sentiment thus happily expressed by Mr Combe—"Opposition between science and revelation I sincerely believe to be impossible, when the facts in nature are correctly observed, and divine truth is correctly interpreted."†

Science is the handmaid of religion. She teaches us to look through nature up to nature's God. She leads us to the footstool of Jehovah's throne, and bids us fall prostrate there. She teaches us to adore and to love the mysterious Author of being and of blessedness. She instructs us in the reasonableness of gladly obeying Him. But whether does she place God afar off from us, or bring him impressively nigh? We answer, one part of her ministration is to show us that, as in him we LIVE, and MOVE, and ARE, he cannot be far from any one of us. She teaches us not simply that Deity once DID *work*, but also that he DOTH *work*. She teaches us that, while the energy of the Divine Being is, in some departments of the universe, exerted in a manner generally constant and capable of being calculated, in other depart-

* Philological View of the Modern Doctrines of Geology, p. 36.

† Constitution of Man, p. 89.

ments it gives rise at certain eras to new phenomena—phenomena of an order altogether superior to those of preceding eras—phenomena not of development, but of origination.

In proof of this, geology points to her successive rock formations. In corroboration, fossil zoology discloses her proofs of the successive production of species—species not derived by development from preceding species, but suddenly and independently originated. The same is confirmed by the aspect of the fossil flora of each geologic era.

The lesson taught us by these archaic phenomena, is a lesson regarding various *successive* creations. To impress this lesson yet more deeply, and bring the pages on which it is written more distinctly before us, astronomy points to the stellar heavens, and reveals not only comets new to us, wheeling towards the sun, from the dim obscurity of the immeasurably remote, but also new stars, blazing out with unexpected lustre, where none appeared before, thus intimating to us the creation, in our own day, of new suns not less splendid than our own.

And ever and anon the tremendous heavings of the earthquake, and the appalling eruptions of volcanic matter, remind us of those central fires yet uncooled, that probably are still keeping the interior materials of the earth in fusion, while we live by God's mercy on its crust—which, if agitated but a little, would at once supply the means of a universal conflagration. This, while it fills us with awe, authorises us, when we connect with it the testimony of geology concerning the successive improvement of the world by *past creations*, to

anticipate with joy a new creation—the production of " new heavens and a new earth, wherein dwelleth righteousness."

All this tends to bring the thought of an Omnipresent and Everworking One impressively near us. All this teaches us to " walk before God." It teaches us that adoration, and confidence, and love, expressed by the lip, and ever influencing the heart and life, are indeed our " reasonable service."

CHAPTER V.

DOES THE HISTORY OF MANKIND ESTABLISH MR COMBE'S THEORY REGARDING PROGRESSIVE DEVELOPMENT?

THAT mankind are, on the whole, making advancement in knowledge and civilisation, we admit. This advancement, however, is not owing to the mere development of inherent elements of improvement in human nature. For this advancement of mankind, we must assign a very different cause. That cause is divine mercy. Our world, though fallen, is not forsaken. It is marred; but there are agencies working to effect its restoration to order, beauty, and blessedness. Apostate man is the object of redeeming love, and the subject of renewing grace. The providence which guides the world is a gracious and remedial providence. In the curse itself, there was the embryo blessing. Human nature, now fallen and dishonoured, is yet to rise, in the saved, to an elevation far higher than that on which it originally stood, and to shine forth with a lustre far surpassing that with which it was originally invested. God's voice of restoring love mingled itself even with the sentence which devoted man to fatigue, sorrow, and death. These are curative as well as punitive; and, when submitted to in the manner our Creator intends and requires, they produce a rich harvest of felicity even in this world. Labour has its happy excitement.

It is the nurse of health and the parent of animal enjoyment. Even the *sorrow* of the virtuous and holy issues in joy. They die to live—to live for ever. Rich showers of undeserved beneficence are continually descending to refresh our world, notwithstanding all its guilt and debasement. God loves it still. His long suffering goodness leads men to repent. His free and boundless redeeming grace rejoices over all that repent. He is powerfully, though secretly, putting forth influences whose tendency is to effect the restitution of the world. Elements of improvement *there are* in the moral world: these elements are being developed; but these elements are not *inherent;* they do not belong to human nature *as such;* they are superadded. Human nature, unaided by new communications from the Father of lights, would grow darker and darker. It needs to be elevated and purified by divine power, as well as pardoned through divine mercy. Such is the view of human nature given in the sacred Scriptures. In them we are plainly taught that the world "does not contain within itself the elements of its own rectification."

Such views are not inconsistent with the fact that the moral department of the world has on the whole improved. They are, however, quite irreconcileable with the hypothesis, "that the moral department of the world *contains* WITHIN ITSELF *the elements of improvement*, which time will evolve and bring to maturity." On the theory, that human nature is being improved through Divine agency, we are entitled to expect that at successive eras in the world's history more and more knowledge, virtue, and felicity should be

found in it. We are also entitled to expect the same, on the theory that "the world contains within itself the elements of improvement, which time will evolve and bring to maturity." The fact of progress proves nothing in favour of either theory. We must look more closely into the history and circumstances of human progress in knowledge, goodness, and happiness, in order to learn which of the assigned causes is the real one.

Mr Combe refers us to the history of our own country since the time of the invasion of Britain by the Romans. Now, before examining the actual circumstances of this history, let us ask what each of the theories should lead us to expect.

On the theory of successive development of the inherent elements of human improvement which Mr Combe advocates, there appears a very strange and anomalous fact at the very outset. It is announced in his first brief sentence,—"At the time of the Roman invasion the inhabitants of Britain lived as savages, and appeared in painted skins." The fact is admitted on all hands; but how are we to account for it? How, we ask, on Mr Combe's hypothesis, had one portion of the human family progressed so slowly compared with another portion, all having sprung from the same root, all having in them originally the same elements of improvement? "Time," Mr Combe contends, "will evolve those elements and bring them to maturity." Well; the world was just as old to the savage Britons as to the civilised Romans. The same elemental principles were originally in the one race that were in the

other. The same time had been allowed for maturing those elements. Why, then, was there such a difference between the Britons and their invaders in point of knowledge and of civilisation? It was not the sun nor the soil; they remain. Look to Italy and to Britain. The inhabitants of the latter are not now less civilised than the inhabitants of the former country. Why, then, we again ask,—why this difference in progress, during the *same* time, of the *same* elements of human improvement? Mr Combe tells us, that "The Creator, having designed a higher path for man than for the lower creatures, has given him intellect to discover his own nature and that of external objects, and left him, by the exercise of that intellect, to find out for himself the method of placing his faculties in harmony among themselves, and in accordance with the external world."* Well; the question is, How came different portions of the one race, with "the elementary principles both of mind and body the same," to make progress in knowledge, and in conformity to the natural laws, so very unequally? Why, for instance, did the Romans clothe themselves, while the Britons ignorantly and foolishly exposed themselves to all the severity of our climate in their painted skins? It will not do to tell us that time and experience are requisite to this progress, when the same time was afforded in both cases, and the same experience of the effects of heat and cold; or, if there was a difference, our ancestors had possessed the larger share of experience to teach them the advantage of being comfortably

* Constitution of Man, p. 3.

clothed. Mr Combe says truly, that "history exhibits the human race only in a state of progress towards the full development of their powers and the attainment of rational enjoyment."* Granted; but why do not all advance with equal speed? That is the question. On his hypothesis, we should expect ceaseless advancement among all the tribes of mankind; for they all have in them the elements of improvement—the same elements—"which time will evolve and bring to maturity." On this principle, there should be no regress of any tribe towards barbarism. Is this the case? Let the present condition of society in Italy itself answer. Look at Spain, and say whether it has progressed or retrograded since the days of Ferdinand and Isabella. Look at Greece, when Byron sought to rouse her from apathy and degradation, and, contrasting her condition then with what she was in the days of her sages, her poets, and her heroes, exclaimed,—

"The soil, the sun, but not the slave the same."

Rude tribes now occupy the fields once covered with splendid palaces. Why this degeneracy? It will not do to attribute the degeneracy,—the decay of a people solely to extraneous causes, such as the irruptions of barbarous hordes. A civilised people, if not enervated by vice, must be more powerful than a rude one.

Imperial Rome, it is well known, sunk into the abyss of gross wickedness, before the Goth was able to trample on her eagles, and snatch from her the sceptre of the world.

* Constitution of Man, p. 3.

Greece fell; but why? Because of her degeneracy.

——"No foreign foe could quell
Her soul till from itself it fell,
Yes; self-abasement paved the way
To villain bonds and despot sway."

Now, why this regression in a people so intelligent, polished, and favourably situated as the Greeks. Their skulls were well formed, as Mr Combe informs us in his System of Phrenology.* In the Greeks, the elements of moral improvement had, to a considerable extent, evolved themselves. Why did not the evolution proceed? Why did not *time* carry on the process towards their maturity?

The same questions that we have asked concerning the Greeks may, with complete propriety, be asked concerning other ancient nations. The Assyrians, the Egyptians, the Babylonians, and the Persians, all advanced in knowledge and civilisation *for a time*, then became degraded, morally and intellectually, and ultimately fell, more through internal corruption than from foreign aggression.

Why did the elements of moral improvement that were in them, after being so far evolved, cease to evolve themselves? Why did not TIME, to which alone Mr Combe refers as requisite to mature them, actually carry on the process of evolution towards their maturity?

Instead of regress there ought to have been progress. Why has the progress not been realised?

* Page 358.

That there has been little or no progress, Mr Combe himself plainly intimates. He tells us that, "man has hitherto been ignorant of his nature and its relations; and that, in consequence, his modes of life HAVE NEVER BEEN ADOPTED *from enlightened views of his whole capacities and qualities*, but sprung up from the instinctive ascendancy of one blind propensity or another."* And this general, sweeping sentence of condemnation, which he pronounces on all the tribes of mankind that have hitherto existed on the face of the world, he extends distinctly to the inhabitants of Britain.

If Mr Combe is right, the history of mankind can afford no valid proof that his hypothesis is correct, "that the moral department of the world *contains within itself* the elements of improvement, which *time* will evolve and bring to maturity."

But Mr Combe *is not quite* right. He *here* grants us more than we ask. Elsewhere he speaks more guardedly and more accurately. We admit a progress in the human family, taken as a whole; but, on Mr Combe's hypothesis, there should have been a progress made by every tribe of human beings in every age. This we do not find to have been the case. History teaches quite the opposite. It plainly contradicts Mr Combe. Scripture, on the contrary, gives us the means of accounting for *both* facts,—the progress and the regress of human nature. To account for man's progress in knowledge, virtue, and happiness, it unfolds to us, not fully indeed, but yet adequately, a gracious remedial providence, wise in all its operations,

* Constitution of Man, p. 4.

and kind even in its severity,—ruling among the nations, overthrowing the flagrantly vicious, and raising to eminence and power the comparatively virtuous,—bearing long with wicked rulers and wicked nations, but ultimately overwhelming the incorrigible in ruin,—breaking the arm of the proud oppressor, and exercising righteous judgment for all the oppressed. To account, further, for all this progress, it presents the extending and brightening page of revealed truth. It refers to its own instrumentality in enlightening the minds and improving the hearts of men. In addition, it refers to the instructive page of nature, which declares the glory of God, and exhibits clear, convincing proofs of his wisdom, power, and goodness—in the numberless and infinitely varied objects, physical and organic, that are everywhere placed before the eyes of mankind. And, finally, it refers to spiritual influences, which, operating powerfully, though secretly, enlighten and renew the human soul. These conjoint and harmonious causes, primary and secondary, adequately account for any progress in moral goodness and true happiness, that the human race has ever made.

The regress which unhappily has often taken place, the Bible ascribes chiefly to innate human corruption,—to the downward tendencies of man's fallen nature. On this principle, we are supplied with a full explanation of the lamentable fact mentioned by Mr Combe, in reference to the race generally, and taken as a whole, namely, that hitherto man's modes of life "have never been adopted from enlightened views of his whole capacities and qualities," but have "sprung up

from the instinctive ascendancy of one blind propensity or another."

Thus we find that the views which Mr Combe repudiates, are in conformity with the great facts of human history—facts which, on his hypothesis, admit of no proper explanation.

From the whole tenor of the evidence, we are entitled to conclude, that the facts to which Mr Combe appeals, instead of supporting, contradict his great fundamental principle, viz. :—

"That the world, including both the physical and moral departments, contains within itself the elements of improvement, which time will evolve and bring to maturity."

This principle forms one of the pillars of the system proposed by Mr Combe. When it is removed, the entire fabric must fall to ruin.

CHAPTER VI.

WAS MAN ORIGINALLY MORTAL?

"THE brain," says Mr Combe, "is unquestionably the workmanship of God; and there exist in it organs of faculties impelling man to kill, that he may eat, to oppose aggression, and to shun danger—instincts which clearly imply a constitution of external nature, corresponding to that which we see existing around him."*

The organs to which Mr Combe refers, must be those which he and other phrenologists designate by the names—"Destructiveness," "Combativeness," and "Cautiousness."

Mr Combe evidently believes that the existence of these organs is inconsistent with the doctrines generally taught by Christian divines, regarding the original innocence, and regarding the fall of mankind; for he says again—

"Theologians who enforce the corruption of human nature, would do well to consider whether man, as originally constituted, possessed the organs of these propensities or not. If he did possess them, it will be incumbent on them to show the objects of them in a world where there was no sorrow, sin, death, or danger."†

As Mr Combe is the assailant, it is rather incumbent on him to dislodge the theologians whom

* Constitution of Man, p. 2. † Ibid. p. 21.

he opposes, from their position. They can plead prescription for their doctrines. It is his duty to show the falsity of their views. The burden of the proof lies on him, not on them. In attempting to impose this burden on those theologians, he acts very unfairly.

But, waiving this, we say Mr Combe himself has shown the objects which might engage and exercise those faculties, in a world where there was no immediate liability of man to sorrow or death, and where there was as yet no sin. The case should be stated fairly. We take that view of it which appears to us to be presented in the Scriptures themselves. It is in reference to man, not in reference to the inferior animals, that Paul says, "Sin entered into the world, and death by sin;" for he immediately adds, "and so death passed *on all men*,* for that all have sinned." The assertions of the Bible go, in reality, no further than this. There may have been death among the lower animals prior to the time when man sinned. The threatening denounced against him in the event of his becoming disobedient, appears to imply that he could know *what* death was. Man was placed at the head of the sublunary creation. He was created a being of a superior order. One of the particulars in which his superiority consisted, was his being exempted, while he continued obedient to his Creator, from decay and from death. By sin, he lost this part of his prerogative as sovereign of the world. His mortality, which assimilated him to the inferior animal races, was the consequence of his

* Εἰς πάντας ἀνθρώπους, Rom. v. 12.

sin. This is the doctrine of the Bible—and sound philosophy has nothing to say in opposition to it.

It is not correct to say that, when man was created, there was no danger in the world. This is not to speak as the oracles of God. They say there was danger then in the world—danger to man. There was the danger of becoming disobedient, vile, sorrowful, and mortal. "Cautiousness" thus had sufficient exercise in Eden. It was because it was not properly exercised that our first parents fell.

We might have been somewhat at a loss to show the appropriate objects of "Destructiveness" and "Combativeness," if Mr Combe himself had not assisted us, by telling us distinctly (at page 26)—"In muscular exercises, *Combativeness*, *Destructiveness*, Constructiveness, Acquisitiveness, Self-Esteem, and Love of Approbation, may all be gratified." Now, in Eden, muscular exercises were provided for man. He was supplied with the vigorous muscular exercises of horticulture. "The LORD," we are told, "put him into the garden to dress it and to keep it."*

Mr Combe adds, "In contending with, and surmounting *physical* and *moral* difficulties, Combativeness and Destructiveness find vent."†

Now, what was the original condition of man, as stated in Scripture? It was a state, not of idleness, but of useful exertion. He was employed in surmounting physical difficulties. It was a state, not of quiescent safety, but one in which it was requisite for him to exercise continual vigilance, and resist temptation with energy—a state

* Gen. ii. 15. † Constitution of Man, p. 26.

in which there were moral difficulties to be met, and opposed, and surmounted. In fact, it would appear that man fell by not exercising his Cautiousness, and Combativeness, and Destructiveness, if Mr Combe has rightly interpreted the use of these faculties, when he says that the latter two "may obtain vent" "in contending with, and surmounting moral difficulties."

It is alleged that Destructiveness impels man to kill, that he may eat. But, as we have seen, the tendency or instinct may be gratified in another way. Doubtless, this must be the case; for there are millions to be found, even in our own country, who all their lives never killed either ox, sheep, hare, rabbit, or fowl, that they might eat it. For our own part, while we have no objection to eat either beef or mutton, we really never once envied the butcher the pleasure of thrusting his knife into the throat of a cow or lamb. If there is a pleasure in killing the animals whose flesh we eat, we are perfectly willing to forego our share of that pleasure. Reader, do you feel any great reluctance to exercise similar forbearance? Are your brains really defective on this account? Surely not. But man, we are told, has a carnivorous stomach. Now, the fact is, man's stomach is omnivorous. He eats herbs, grains, roots, barks, fruits, reptiles, mollusca, crustacea, fish, fowl, and beasts of almost every sort. He can eat almost any thing. He can live on flesh; he can also live very well without it. Multitudes in our own country seldom ever taste animal food. There are numerous tribes of human beings who altogether abstain from eating flesh, and yet they are healthy and vigorous. As man can live in all climates, he can also live on a

vast variety of nutritive substances. *When he must*, he *can* kill that he may eat. He can also dispense with the eating of what has lived; and even if he eat such food, he can, with perfect ease and pleasure, dispense with the killing process.

Theologians, therefore, need not be much at a loss to show the objects on which the faculties to which Mr Combe refers might be exercised in the place and condition that man held when he was created, and while he continued obedient to his Creator. We have as yet found no evidence that man was originally mortal. What though carnivorous animals might exist? They were not to eat the flesh of man. *Their* carnivorous propensities afforded no evidence of *his* mortality.

Against the original immortality of man, Mr Combe urges four objections, which we shall briefly notice:—

1*st*, "It is obvious that Amativeness and Philoprogenitiveness are provided with direct objects of gratification, as one concomitant of the institution of *death*."

We answer, No. These faculties are provided with direct objects of gratification, as one concomitant of the institution of *birth*.

"If the same individuals had lived here for ever, there would have been no field for the enjoyment that flows from the domestic union, and the rearing of offspring."

To this allegation of Mr Combe's we reply:—We do not need to suppose that the same individuals would have lived *here* for ever. After their term of trial was over, they might, either individually or collectively, at stated periods, have been removed to some other, and still happier world.

"The children of the resurrection" will be perfectly happy, although they "neither marry, nor are given in marriage, being as the angels of God."

Mr Combe tells us in continuation, that—"The very existence of these propensities shows that the production and rearing of young form part of the design of creation." Be it so. What then? "The successive production of young appears necessarily to imply removal of the old." Perhaps not. But granting, for the sake of argument, that it implies "*removal* of the old." There are other modes of removal from this world possible besides death. Enoch and Elijah were removed from among men without dying. What occurred to them might occur to others, and, if requisite, to *all* others.

We proceed to consider farther, Mr Combe's objections.

2*d*. "Had things been otherwise arranged, all the other faculties would have been limited in their gratifications."*

Why, how must they have been limited in their gratifications?

"Conceive," says Mr Combe—"conceive for a moment how much exercise is afforded to our intellectual and moral powers, in acquiring knowledge, communicating it to the young, and providing for their enjoyments—also what a delightful exercise of the higher sentiments is implied in the intercourse between the aged and the young—all which pleasures would have been unknown had there been no young in existence." Admitted.

* Constitution of Man, p. 56.

What then? Mr Combe adds—"which there could not have been without a succession of generations."* But what does a succession of generations imply? Why, simply successive *birth*, not *death*. Translation, like the translation of Enoch, would secure all these advantages, without introducing the pain and sorrow that precede, attend, and follow death. Let us go on with our examination:—

3*d*. "Constituted as man is, the succession of individuals withdraws beings whose physical and mental constitutions have run their course and become impaired in sensibility, and substitutes in their place fresh and vigorous minds and bodies, far better adapted for the enjoyment of creation."†

Admitted; for God brings good out of evil. But constituted as man *was* while innocent, his physical and mental constitution would not have become impaired in sensibility, and that reason for removal would not have existed.

4*th*. "If I am right," says Mr Combe, "in the position that the organic laws transmit to offspring, in an increasing ratio, all the qualities most active in the parents, the law of succession provides for a far higher degree of improvement in the race than could have been reached, supposing the permanency of a single generation possessing the present human constitution."‡

What of that? Would it not be better that each individual generation should, at once, obtain that constitution which forms the *ne plus ultra* of the race? Would not the race be more virtuous and happy, if every skull were to have, *at*

* Constitution of Man, p. 56. † Ibid. ‡ Ibid. p. 58.

first, the best possible configuration—every brain the best possible condition as to the magnitude, health, activity, power, balance, and tone of its organs? Would it not be better that man should *at first, and during perpetuity*, be "very good," than that he should at first be "a ferocious, sensual, and superstitious savage," as Mr Combe tells us he is, when ignorant and uncivilised,—then become better,—continue to improve through successive ages,—and then, lastly, at some remote era, become very good? Surely none can doubt the fact that original and continued goodness would, on the whole, be far more desirable than the same amount and degree of goodness attained after numerous ages of ignorance, crime, and misery. The former is the original scriptural arrangement—the latter is that for which Mr Combe is pleading as the most advantageous one. Mr Combe seems to contend that death is, *in itself*, inevitable by man. He tells us that he is bound to regard it as the result of the organic law, and to treat it as such. He concludes that, "The true view of death as a natural institution, is, that it is an essential part of the very system of organisation; that birth, growth, and arrival at maturity, as completely imply decay and death in old age, as morning and noon imply evening and night, as spring and summer imply harvest, or as the source of a river implies its termination."*

If Mr Combe is right here, man, having been always an organised being, must, from the first, have been mortal. He surely cannot absolutely

* Constitution of Man, p. 56.

deny the ability of God to create man immortal. The argument from man's present to his pristine condition is irrelevant; because the very supposition made is, that man is at present in a different condition from his pristine one. What is true of man, as he now is, may be false when applied to man as he then was. Although the tiger and hippopotamus could not now attain their full growth and vigour in this part of the world, it does not follow that they never inhabited it. Although the ichthyosaurus could not now live in the seas and shores of Britain, it does not follow that that animal never lived there. Though man is not now immortal, it does not follow that he never was immortal. Death is inevitable by men in general, only because God has willed it to be inevitable by them: not because it is, by *à priori* and absolute necessity, inevitable. Life is often preserved in circumstances in which we would be apt to pronounce, at once, that its preservation must be impossible. Living seeds buried in the bowels of the earth, remain unchanged for thousands of years, and afterwards spring into active life, with all the vigour of a seed formed under our own eye. "Hence, in the neighbourhood of quarries, new plants are continually making their appearance, which had never before been observed to grow near such places."* Living toads are said to have been found imbedded in the interior of rocks.†

The necessity of frequent supplies of food to repair the continual waste to which the animal

* Library of Useful Knowledge. Animal Physiology, p. 4.
† Edinburgh Philosophical Journal, vol. viii. p. 402.

structure is subject, appears to be a very urgent one. The continuance of life seems to be precluded when such supplies cease to be received: and yet the common caterpillar, which originally is so voracious as to eat several times its own weight of food in a single day, remains, when in the chrysalis state, without receiving any food, for several months, yet still alive, capable of sensation and motion, as is at once seen when it is touched by the finger. Meantime this humble animal is undergoing changes which, if we had not witnessed their actual occurrence, we would be apt to regard as utterly incompatible with the laws of organisation. It loses ten of its sixteen feet. The remaining six are quite unlike those which they have succeeded. Its once voracious jaws evanish. They are replaced by a curled up proboscis, suited only for sipping the nectar of flowers. The shape of its head completely changes. Two long horns, or antennæ, of exquisite sensibility, spring forth from it. Its twelve small eyes disappear, and in their place the animal is supplied with two large round clusters of eyes, composed of at least 40,000 convex lenses, each supposed to be an effective eye. The internal conformation of the animal also undergoes changes not less wonderful. Its stomach changes, both in its capacity and in its digestive powers; for the animal is now to live on a species of food entirely different from that which it formerly so very greedily devoured. Its very nervous system is altered and remodelled. Its locomotive power is wonderfully improved. Once it crawled slowly, and with difficulty; now it flits about through the air with light and graceful ease; for it is supplied with two pairs of beautiful and

effective wings. Each of these is adorned, in countless numbers, with minute yet splendid silvery feathers. In short, it is arrayed in a splendour which an oriental sovereign must emulate in vain. Such changes would appear utterly incredible if they did not actually take place before our eyes. Does the Creator do so much to fit an insect to flit its few happy hours in the sunshine? and are we to deny his ability or his willingness to give *Man*, while obedient and innocent, a constitution superior to that which he now possesses when rebellious, guilty, and defiled?

If, for such humble forms of sentient being, the ordinary laws of life can be suspended or reversed, are we to doubt the ability of the Omnipotent to prolong, beyond any assignable bounds, the life of the far superior creature, Man?

The case of the common caterpillar is only one out of thousands of cases, greatly varied in their minute particulars, but quite similar in their general phenomena. They all concur in teaching the same lesson, viz. how easy it is for God to modify or to reverse, whenever he pleases, the ordinary laws of life and organisation.

Animals of various sorts remain, like caterpillars, for months without food, in a state of dormancy, yet afterwards awake up—unimpaired—to all their former activity. The following allegations rest on the same authority that Mr Combe has quoted in his work to support his peculiar views regarding death. If well founded, their bearing on that subject is important:—"That the cuckoo hybernates, and that, when accidentally found in a torpid state, it appears like a dead mass of matter; that it may be rolled about, or even struck

with a considerable degree of force, without producing the slightest sign of sensation; that its respiration, and every other manifest vital action, seem to be wholly suspended, are well known facts. Equally familiar to us is the annual migration of swallows from our country, and their regular return to it in the month of April; but it is not so generally known that some of these birds, probably the young and the feeble, remain the whole year in Britain: and, as the winter approaches, retiring into the hollows of trees, the clefts of rocks, and the bottom of deep caverns, fall into a torpid state, and continue in a profound lethargy during the cold months." "In the severer climates, the fact of their hybernation is still more abundantly attested; but the most extraordinary statement is that, in such countries, they precipitate themselves into the sea, and into deep lakes and rivers, at the bottom of which they remain, during winter, in a state of profound torpor. If such accounts may be credited, and they are attested by authorities which can scarcely be questioned, how wonderful must be the action of the vital principle in preserving the life of an animal under circumstances so extraordinary in an element which would certainly be fatal to it in a few minutes in its ordinary state, with its respiration suspended, its circulation stopped, and its blood,—in what condition must we conceive this fluid to remain? If it coagulate, which it must do in a few seconds, unless under some counteracting and controlling influence, it can no longer be a living fluid; and how, then, can the animal possibly revive? Yet the animal does revive. But if it do not coagulate, if it remain alive, and therefore

fluid, though at perfect rest, and exposed to such a degree of cold for this length of time, how striking an illustration would this most singular fact afford of the uninterrupted, enduring, and efficient action of the vital principle, under circumstances which would seem absolutely incompatible with its existence even for a few moments!"*

Here we have something which appears quite as incompatible with the laws of organic life, as the immortality of man in paradise can be imagined to be. We do not vouch for its accuracy; but it rests on an authority which Mr Combe cites as sufficient.

Whatever may be the force of this analogical argument in favour of man's original immortality, we are fully authorised by the most sober and enlightened philosophy to assert, with perfect confidence, that in the nature of organisation, there is nothing whatever which forbids us to believe that the Almighty and Allwise First Cause was able to confer on man original immortality. That God did confer this boon upon him the statements of the Bible clearly imply.

* Library of Useful Knowledge, Animal Physiology, p. 5.

CHAPTER VII.

MAN'S FALLEN CONDITION.

Is human nature at present in a disordered and corrupted condition?

On this subject there is little occasion for argument. The extensive sway of actual and flagrant wickedness is a matter of fact. It admits no denial. Man's actual corruption is confirmed every day by the experience of the world.

Mr Combe laments that theologians were led "to form a low estimate of human nature, and to expect little good from the development of its inherent capabilities." But his own account of man's actual condition differs little from theirs. He gives a very dark picture of the early condition of the race: "Man, ignorant and uncivilised, is a ferocious, sensual, and superstitious savage." He contends that the history of man proclaims the march of moral and intellectual improvement, but tells us that that march is "often *vacillating* and *slow*;" and states, concerning man, as we have already seen, that his modes of life *have never been* adopted from enlightened views of his whole capacities and qualities, but sprang up from the instinctive ascendancy of one blind principle or another.* He sums up, in the following words,

* Constitution of Man, pp. 3, 4.

the lamentable history of man:—"He adopted savage habits, because *his animal propensities were not* at first *directed* by the moral sentiments, or enlightened by reflection. He next assumed the condition of the barbarian, because his *higher powers* had made some advance, but *had not yet obtained supremacy;* and *he now* manufactures, because his constructive faculties and intellect have given him power over physical nature, while *his avarice and ambition are predominant*, and are gratified by such occupations."*

So much for man's attainments in virtue hitherto. His attainments in happiness are represented as correspondingly small. Speaking of the various conditions of man consequent to the changes which he has made, Mr Combe says, "He has been *ill at ease* in them all." When speaking of coming times, he anticipates that "a *new* era *will begin*, when man *shall be* enabled to study his constitution and its relations with success; and that *the future* may exhibit him assuming his station as a *rational creature*, pursuing his own happiness with intelligence and design, and at length attaining to higher gratification of his whole faculties than any which he has hitherto enjoyed."†

All this may be *in the future.* The past and the present Mr Combe admits to exhibit human nature in a state at once ignorant, degraded, and unhappy. Even according to his showing, human nature hitherto has been awfully corrupt.

For this corruption he supplies us with a reason, when he says of man—"His *animal*

* Constitution of Man, p. 4. † Ibid.

faculties *act powerfully of themselves;*" and adds, "his *rational* faculties *require to be cultivated, exercised, and instructed,* before they will yield their full harvest of enjoyment."*

Thus the animal part of man takes the lead, and acting powerfully, without the aid of culture or previous exercise, overpowers the rational faculties; and, bringing them into unnatural subjection, occasions the existence of gross sin and great misery. This superior promptitude and activity of man's animal faculties is an inborn defect in his constitution; it is tantamount to an inherent original tendency to sin.

An innate tendency to abuse our faculties, is, to all practical intents and purposes, *corruption,* however good the original quality, or the use of each individual faculty, might be. By *hereditary transmission,* this innate tendency is perpetuated in the race. And this is, in effect, the same as the original corruption and disorder of human nature, which Mr Combe rejects, but which the Bible makes known.

* Constitution of Man, p. 2.

CHAPTER VIII.

MR COMBE'S EXPOSITION AND APPLICATION OF THE NATURAL LAWS.

THE views of Mr Combe, regarding what he calls the Natural Laws, are stated at large in various parts of his book. One of the most condensed statements regarding them is given in the following passage:—

"It cannot be too much insisted on, that the Creator has bestowed definite constitutions on physical nature, and on man and animals, and that they are regulated by fixed laws. A *law*, in the common acceptation, denotes a rule of action; it implies a subject which acts, and that the actions or phenomena which that subject exhibits, take place in an established and regular manner; and this is the sense in which I shall use it, when treating of physical substances and beings."

He holds, "1st, That all substances and beings have received a definite natural constitution. 2dly, That every mode of action which is said to take place according to a natural law, is inherent in the substance or being; and, 3dly, That the mode of action described is universal and invariable, wherever and whenever the substances or beings are found in the same condition."*

There is here a mixture of unquestionable

* Constitution of Man, p. 8.

truth, with what viewed in one sense must be false, though viewed in another sense it may be true. It is true, 1st, That the Creator has *bestowed* constitutions on physical nature, that is, on physical objects. In other words the constitutions which physical objects possess were *given* them—given them during his pleasure. 2d, That the constitutions of physical objects are *definite*, that is, they are distinct, individual, and incapable of transmutation by natural causes. 3d, That no power but the power of the Creator can vary their constitutions.

But it is not true;

1st, That any mode of action of a physical object is otherwise inherent in it, than as it is the will of God that that object should now present that mode of action.

Nor is it true;

2d, That it is beyond the power of God to vary when he pleases, either temporarily or permanently the constitution of physical objects.

Physical objects differ from necessary existences, such as space, number, and their various modifications. These must be what they are. The contrary of a proposition that is true concerning such necessary existences, is not only untrue but absurd. It is not only untrue that the square of the hypothenuse of a right angled triangle, is less than the square of its other two sides; the assertion involves absurdity. The absurdity, though not apparent to every one, can be made clearly out by the mathematician. The subjects of his science are *necessary* truths. A triangle having all its sides equal, must also have its angles equal to each other. The opposite is

absurd. "*There is between Jupiter and Saturn another planet having a ring like Saturn's,*" is a proposition that may be untrue, but it is not absurd. God could make it true. He could create another planet, give it a ring like Saturn's, and assign it an orbit somewhere in the extensive interval between the orbits of those two distant planets. The proposition, *Quicksilver is lighter than lead*—is false. It is false, but not absurd. There might, for aught we know, be a fluid metal lighter than lead, yet resembling quicksilver.

We repeat it.—As the constitution of physical objects depended for its origination on God,—it depends for its perpetuation on God, and is capable of temporary suspension, or permanent modification at the pleasure of God. Physical objects are *what* they are, because he willed them to be such. They continue what they are, because he wills them to continue such. They may at once be changed, either for a time or for perpetuity, whenever he may please. This is the doctrine both of Scripture and of reason.

We are now prepared to examine the proper use of the term *Law*, as applied to the operations which we see taking place among physical objects. Take, for instance, the law of gravitation: "Every particle of matter attracts every other particle, with a force which is universally proportional to the square of the distance between them." This form of expression is convenient. But we err greatly, if we conclude that it expresses *ascertained action* by the particles. There is no proved *activity* of particles in the case. All that we have learned from the phenomena is, the fact of motion among material particles towards

each other. The law would be expressed more accurately thus, "Every particle of matter *is attracted* towards every other particle, with a force inversely proportional to the square of the distance." The fact that bodies *are urged* towards each other we have learned from observation; and that the force of the attraction varies, according to certain rules, Newton ascertained. The rules which he ascertained, on being applied, are found to give results that are in perfect agreement with all the observed phenomena. He discovered and applied the general fact. Under that general fact all the individual facts are found capable of being arranged. This is all. The nature of the force which urges bodies to each other he did not discover. He discovered a law—the law according to which bodies *are urged* towards each other. Other persons have made bold assertions on this subject; but the prince of philosophers, the illustrious Newton, was cautious and modest. Let us hear him. When treating of central forces and their relation to bodies towards which they are directed, he says (Principia, Book i. Section 11, Scholium to Prop. lxix.), "I here use the word attraction in general for any endeavour of what kind soever, made by bodies to approach each other; whether that endeavour arise from the action of the bodies themselves, as tending mutually to or agitating each other by spirits" (vapours or effluvia) "emitted; or whether it arises from the action of the æther, or of the air, or of any medium whatsoever, whether corporeal or *incorporeal*, any how impelling bodies placed therein towards each other. In the same general sense I use the term impulse, not defining in this

treatise the *species* or physical *qualities* of forces, but investigating the quantities and mathematical proportions of them, as I observed before in the definitions." In these definitions (viz. in Def. viii. Book i.) he says,—"The reader is not to imagine, that by these words, I any where take upon me to define the *kind, or the manner of any action, the causes or physical reason thereof*, or that I attribute forces, in a true and physical sense, to certain centres (which are only mathematical points); when at any time I happen to speak of centres as attracting or as endued with attractive powers."

Newton did not assert that bodies *really act* upon each other when they are urged to one another by what is called the attraction of gravitation.

"The Law of Definite Chemical Equivalents" is a similar instance. It is a mere general fact comprising a multitude of subordinate instances or facts. So with all other laws of nature. They are not rules of action otherwise than as they are enunciations of the manner in which certain phenomena have been observed to occur. *

* On the subject before us, we quote with much pleasure from the opening discourse delivered last year (1845) by Sir John Herschel, before the British Scientific Association, the following passage:—"A *law* may be a *rule* of action, but it is not *action*. The Great First Agent may lay down a rule of action for himself, and that rule may become known to man by observation of its uniformity; but constituted as our minds are, and having that conscious knowledge of causation, which is forced upon us by the reality of the distinction between *intending* a thing and *doing* it, we can never substitute the *Rule* for the *Act*. Either directly, or through delegated agency, whatever takes place is not merely *willed*, but *done*, and what is done we then only declare to be explained, when we can trace a process, and show that it consists of steps analogous to those we observe in occurrences

When Mr Combe further affirms—"There are no exceptions to the laws of nature"—we demand adequate proof. He gives no physical proof. He offers as proof the wisdom and power of the Creator. He says truly, "the Creator is too wise and too powerful to make imperfect or inconsistent arrangements." Doubtless; but then the question returns—"What is the nature of such arrangements as are perfect?" Must such arrangements be absolutely *invariable*, even by the Creator himself,—or may not perfect arrangements include, *in their very perfection*, a certain amount of *occasional variation*—adapting them more fully for accomplishing the Creator's wise and benevolent designs? We cannot permit Mr Combe to *assume* that the laws of nature—which, whatever they may be *proximately*, are ultimately laws which God chooses to observe in governing his creation—can admit no exception. We do not contend for such a variableness as would justly shake human confidence in the general constancy of nature. God is too wise to introduce any such variation. Its effect would be extensively mis-

which have passed often enough before our own eyes to have become familiar, and to be termed *natural*. So long as no such process can be traced and analysed out in this manner, so long the phenomenon is unexplained, and remains equally so whatever be the number of unexplained steps inserted between its beginning and its end. The transition from an inanimate crystal to a globule capable of such endless organic and intellectual development, is *as* great a step—*as* unexplained a one—*as* unintelligible to us—and in any human sense of the word, as *miraculous* as the immediate creation and introduction upon earth of every species and every individual would be. Take these amazing facts of geology which way we will, we must resort elsewhere than to a mere speculative law of development for their explanation.

chievous. We do naturally expect the physical operations which occur in our world to be constant. But this expectation does not necessarily exclude every shadow of doubt. We admit the universal truth of the maxim, "Like physical results will occur in like cases." Still, since the Omnipotent can control or reverse every secondary cause which he employs in his ordinary providence—cases of his intervention may occur. In such cases, a new, a most important element enters; and therefore, the cases are not like those into which this element does not enter. Consequently, we ought to expect the results to be unlike the ordinary results.

The dogma in which the absolute invariableness of the natural laws is affirmed, is established by no substantial proof—is based on no sound philosophical principle whatever.

The Scripture abounds with instances in which physical laws were temporarily suspended. The dividing of the Red Sea when the rod of Moses was stretched out over it—the preservation of the three Hebrew youths in the fire—the obscuration of the sun at the Redeemer's crucifixion, may be cited as specimen cases in which the constancy of the physical laws was superseded. If such cases be pronounced impossible, then the Bible must be pronounced to be a tissue of fables.

In believing such cases we sin against no principle of sound philosophy. At the same time, we lie under no obligation to doubt the *general* constancy of nature, or the extreme rareness of supernatural intervention with the regular observance of physical laws. The constancy of nature affords room for the exercise of human

prudence and industry; and the occasional use of wisely directed miraculous agency accredits that divine message which gives rationality to human faith and firmness to human hope. It also gives perfect flexibility to providential arrangements, and simplifies the philosophy of prayer. The general steadiness of the rule, and the occasional occurrence of the exceptions, conspire to render the arrangements in reference to physical laws, a system *perfectly* fitted to promote the honour of God in the welfare of this, his sublunary creation.

Those who will not admit the reality of miraculous agency in the government of the universe, must contradict not only the testimony of Scripture, but also the testimony of philosophy. They must, in particular, reject the deductions of geologists regarding successive creations, and the decisions of zoologists, regarding the permanency of the characteristics which distinguish the various species of terrestrial animals from each other. And after all, they must either embrace the huge absurdities involved in the supposed *eternity* of matter, and in the *fortuitous* production of minerals, vegetables, and animals—in all their admirable beauty and variety; or else they must admit that, at one era, there was the employment of an agency so stupendously miraculous, as both to call matter into existence from the previous universal nonentity, and also to invest it with qualities so wonderfully varied in themselves, and so wisely adapted to each other, that all that has been, is, or ever shall be, must be regarded only as the successive development of effects resulting from those qualities. This is not

escaping the recognition of miraculous agency. It is simply confining that agency to a single era. During that era, however, miraculous agency must have been boundlessly vast and varied in operation. It must have had concentrated within itself a marvellous combination of all that is overwhelming to the mind in supernatural agency.

This appears to be the view given of creation by Mr Combe. He does not deny miraculous agency: he cannot. But he does put the period to which it belongs, so exceedingly far back, that the mind can scarcely realise the truth that such an era ever existed. It does not impress the mind, it is so "dim, and shadowy, and etherial." He does not escape the recognition of miracle—but he renders its recognition unimpressive.

Now, the testimony of geology contradicts this grand, mysterious, unsubstantial system. It corroborates the scripture testimony regarding the comparatively recent creation of man. It tells us of other creations, at eras, vastly remote indeed, but clearly successive;—it brings before us, in impressive reality, the forms and structures and habits of animal races now extinct, which successively owed their origin to miraculous agency, era after era, until the time when the world, by a new interposition of the same agency, was fitted for becoming the abode of the human race.

And, if we are to credit astronomy, creative power has not slumbered all the time that man has been an inhabitant of the world. New stars have at successive periods presented themselves in quarters of the firmament where they were

unobserved before, so that the mighty work of creation may still be going on. Thus, philosophy, as well as religion, justifies us in concluding, that while nature, physical and organic, is, in general, constant in its phenomena, it is *neither necessarily nor universally so;* but that, on the contrary, the general uniformity has often been interrupted by successive displays of supernatural power. This leads us to the conclusion, that miracles have not ceased, but that they are still performed in various parts of the immense domains of the glorious Eternal One.

CHAPTER IX.

ON THE EFFICACY OF PRAYER.

We now proceed to notice the views of Mr Combe, regarding the efficacy of prayer.

These views, which he explains somewhat at large in the chapter on the Relation between Science and Scripture, are summed up in a passage quoted from Dr Leechman:—"The efficacy of prayer does not lie in the mere asking, but in its being the means of producing that frame of mind which qualifies us to receive."*

Now, the scriptural view of prayer invests proper asking with efficacy, both in consequence of "its being the means of producing that frame of mind which qualifies us to receive," and also because God has engaged to grant the *proper* objects of our desire, when they are asked in the proper manner,—that is, through the Saviour's mediation, and by the aid of the Holy Spirit.†

Scripture examples cast a strong light on scripture doctrines—elucidating what might otherwise be left in a state of obscurity. On the subject of prayer we have many striking illustrative examples, both in the Old Testament and the New. We there meet with instances in which the efficacy of prayer might possibly be referred

* P. 93.

† Philippians iv. 6, 7; Matt. vii. 7; xviii. 19; Luke xviii. 1-8; John xvi. 2, 3; Rom. viii. 26, 27; Jude, verse 20.

to Mr Combe's principle; but we also meet with other instances which cannot be fairly explained without having recourse to other principles. The prayers which an individual offers for himself might perhaps have their efficacy accounted for on the principle which Mr Combe has adopted, —at least in some cases. In these we might have no means of proving that their efficacy did not arise from their fitting the suppliant to receive what he solicited. It is otherwise when one person prays for another person, or for results which do not terminate in himself as their object.

The prayers of Moses were frequently of this sort—the sort that do not admit of explanation on Mr Combe's principle. As instances, we may mention the prayers of Moses for Pharaoh and the Egyptians,* and also his prayers for Israel.† Such were the prayers of Samuel;‡ such was the prayer of the prophet for Jeroboam;§ such were the prayers of Elijah.‖ In no one of these instances could prayer have had its recorded results, simply because it qualified the suppliant to receive the answer of his prayers. Take, for example, Elijah's prayer for rain. *That* prayer, in itself, could have no effect whatever on the atmosphere. His prayer might affect his own heart, but it could not affect the clouds; it could not have the smallest *direct* influence. It was heard by God, who has power over the elements,

* Exod. viii. 12, 13, 30, 31; xi. 27–29 and 33; x. 16–19.
† Ibid. xxxii. 11–14.
‡ 1 Sam. vii. 8–10; xii. 18.
§ 1 Kings xiii. 6.
‖ Ibid. xvii. and xviii.; James vi. 17, 18.

and who answered in a visible manner the fervent prayer of his prophet. The prayer of the same remarkable personage for the fire of heaven, which descended and consumed the victim which he presented to Jehovah, with the wood and the altar itself, is evidently another which cannot be explained on the principle advocated by Mr Combe. Such also was the prayer of Peter for the resuscitation of Dorcas; such were the prayer of Paul for the recovery of Publius's father, and the prayer of Cornelius for instruction.*

Each of these cases presents other effects than those which terminate in the suppliant's own mind, as the result of prayer. The view of Mr Combe regarding prayer is not the complete view of it which the Bible gives. Prayer, doubtless, has a salutary effect on the mind of him who offers it. It brings the mind into contact with the solemn and delightful truths connected with the being, perfections, and providence of God. "He that cometh" by prayer "unto God, must believe that he is, and that he is a rewarder of them that diligently seek him." The dim, misty dreams of practical atheism must fade away from his mind; and the bright objects belonging to a world which God made in infinite benevolence, and rules in wise accordance with the same benevolence—caring for each of all its inhabitants, *especially for each of the human race*, whom he has regarded in infinite compassion, and whom he delights to save—these objects are brought impressively near him who, in sincere, believing prayer, approaches the throne of

* Acts ix. 40; x. 30-32; xxviii. 8.

grace. On the mind of the humble, believing suppliant, these sublime, ennobling objects of contemplation doubtless have a most beneficial effect. But it is scarcely proper to say that prayer "produces that frame of mind which *qualifies* us to receive." The offerer of prayer is utterly *unworthy* to receive. In an important sense he is completely *unqualified* to receive. He deeply feels this. On his own *qualifications* as a recipient he dares not look, for therein he would descry, not grounds of confidence and joyful anticipation, but reasons for fear and despondency. What emboldens him to ask? Nothing whatever in himself. Where finds he his grounds of joyful anticipation? In the character, procedure, and promises of Him to whom he draws near in prayer. To be efficacious, prayer must be the prayer of faith. There must be no indulged doubtfulness,* else there will be no happy result. And there must be humility as well as faith. Now, if when we pray we are to suppose that the efficacy of our prayers is to depend on our own qualifications, (and if this is the fact, why should we not think it the fact?) then, either our humility or our faith will be endangered; we shall be apt either to feel a self-complacency highly offensive to the pure Being we address, or else to sink into desponding distrust when we view our own sad deficiencies and aggravated offences. It is God's promise, not our good qualities, on which the efficacy of prayer depends.

Mr Combe seems to infer that prayer can be

* James i. 3–7.

efficacious only by qualifying us to receive the blessings asked; because God is not wrought upon or changed by our prayers, there being with him "no variableness nor shadow of turning."

To this we answer, that, in the same chapter in which we are told that the Father of Lights is such that with him "is no variableness nor shadow of turning," we are also told to ask *in faith*, nothing doubting. The fact must be consistent with the duty. This *must* be, whether we can account for their consistency or not. But why should the divine immutability be brought up to view, to cast doubts on the efficacy of prayer? There is no more inconsistency between the immutability of God and the efficacy of prayer, than there is between the immutability of God and the efficacy of agricultural effort. The God who blesses ploughing, and sowing, and weeding, is the same unchangeable God who blesses praying. His unchangeableness interferes as little with the efficacy of praying as it interferes with the efficacy of sowing. In both, man employs instrumentalities, which derive all their efficacy from the divine fiat, but which divine appointment has invested with *real* efficacy. Our ignorance of the *rationale* of vegetation is nearly as complete as our ignorance of the *rationale* of intercession and divine intervention. Those who oppose their views of the divine immutability to the efficacy of prayer evidently overlook the divine omniscience.

Nothing can take Deity by surprise. His determinations are formed in complete cognisance of all that will happen—of every prayer that ever will be offered to him. His determinations and

his promises harmonise with each other. Both harmonise with his entire nature—with his omniscience, and also with his immutability, as well as with his benevolence. Indeed, properly regarded, the immutability of God is a ground for expecting that he *will* answer prayer. Hath he spoken it, and shall he not do it? Hath he promised, and will he not perform? He *will;* for he changes not.

We change. By prayer we change. As Mr Combe admits, our *characters* change. Our relations to God also change. He who *was* prayerless, is placed in a new relation to God, when he becomes prayerful.

The sun's light does not appreciably change. During the midnight hours of our winter, it falls even more copiously on our planet, than during the mid-day hours of our summer. Our relation to him, however, is different. *Our* end of the polar axis is deflected, and *our* meridian is averted from him. Hence our darkness. Let our end of the axis change its relation to the plane through which we move, and let our meridian be reverted to the sun, and then we shall experience the light and warmth of summer, in place of the obscurity and cold of winter. Why? Our relation to the unchanging sun is changed. The change is in us, not him. The change, however, is not a change in the quality of our soil or our sky. It is not a change in our country's capability or fitness to receive the solar influences. It is a change in our position in reference to the sun—a change in the relation in which we are placed to the source of light and heat. In winter, Britain was averted from the sun. In summer, Britain is reverted to the sun. In like manner, it is in virtue of our altered

relation to God, when we are addressing him in believing prayer, that we obtain our petitions, although He continues unchanged.

The philosophers who object to the proper and direct efficacy of prayer, appear to be very much concerned for the plans and providence of God,—as if the admission of the disturbing influence of prayer would dangerously derange the whole system of divine management—as if it would introduce extensive perturbations in the movements of the objects which else must pursue their paths in peacefulness and regularity. Let them dismiss such groundless alarms. He who gave our planetary system its compensating powers rules over the entire universe, intellectual and spiritual, as well as organic and material.

The planetary disturbances are but temporary. There are restorative forces. All is admirably adjusted. There is a perfect systematising evident every where. What though prayer does introduce a new element of secondary causation? This only complicates the system of providence. It does not derange that system. Prayer is only one of the many elements of secondary causation with which God has to do in managing his world. Knowing and prescribing the full range and influence of prayer, there is nothing in it at all perplexing or anomalous to Him. If the influence of prayer implies supernatural intervention, so does creation,—so does the creation of each race,—each species, whether animal or vegetable,—each beast, each bird, each reptile, each fish, each insect, each mollusc, each zoophyte, each tree, each flower, each plant, each moss, each animalcule, each microscopic plant, each atom.

Philosophy differs from Scripture, not in narrowing, but in expanding, the field of creation. The Bible tells us of the making of one sun; philosophy assures us of the creation of millions. For the one planet mentioned in the Bible, philosophy presents us with companies of planets, both around our sun, and also around the other millions of suns. Philosophy, with the same unsparing liberality, multiplies the moons in the universe. It unfolds to our astonished minds the vastness of the cometic orbits, and the multiplicity of the cometic bodies. In addition to the miraculous agency mentioned in Scripture, philosophy demands that we admit the existence and operation of similar agency in millions and millions more of other instances. Such are the demands of astronomy alone. And what are the demands of micrology? That, corresponding to *the vastly great*, disclosed by the telescope, we admit the existence of *the vastly minute*, discovered by the microscope, which magnifies the mite into a mammoth—exhibits numerous strands in the gossamer's thread—presents to our delighted eye the splendid plumage of the tiny insect's wing—and peoples a minute drop of water with myriads of living creatures, sporting about at their ease as in an ample world. Each animalcule tells us of supernatural powers put forth in the creation of the tribe to which it belongs.

Then what are the demands of geology? That we multiply creative eras—that we admit numerous past creations, each bringing into being varied forms of organic and sentient creatures. It tells us that the crust of the earth is the crowded tomb of departed living forms. It tells us that the one creative era mentioned in detail by Moses, was

not the only one. It confirms the testimony of Scripture, that the goings forth of the Everlasting Father have been of old, during the undiscovered depths of past duration. It overwhelms our faith with the multitude of miracles which it calls us to admit.

Such are the requirements of philosophy. Now, after all this exhibition of the immensely great, the immensely small, and the immensely ancient, each involving innumerable supernatural interventions, is it philosophy that demands of us to disbelieve the efficacy of prayer, because *perhaps* it may really involve something of supernatural agency in its fulfilment? Away with such pitiful trifling—away with such contemptible drivelling. The philosophy which objects to the efficacy of prayer, is not true science. It is no better than what an inspired writer designates by the phrase, "science falsely so called."

We do not regard Mr Combe as so very blameable as some other writers who have treated of prayer. They have altogether denied its efficacy. He attributes efficacy to it. But the efficacy which he attributes is not such as the Bible assigns it. It is not such efficacy as a sound and enlightened philosophy justifies us in attributing to this most important and delightful exercise.

CHAPTER X.

CHANGES IN MORAL AND RELIGIOUS CHARACTER.

Mr Combe pretty plainly intimates the light value he sets on all expectations of supernatural influences; and avowedly rejects the opinion, that from them human improvement and enjoyment must be chiefly derived. He sets himself very earnestly to oppose the doctrine, that man "must believe aright in religion, and be the subject of spiritual influences, independent of natural causes, before he can become capable of any virtue or enjoyment."* He does not, however, state the doctrine fairly, but presents it in a form much more liable to objection than the form in which it is actually received by Christians in general. While *they* believe the necessity of spiritual influences and of faith to the attainment of true holiness, they admit that certain subordinate and defective forms of virtue may be exhibited by those who do not believe aright in religion, and that various enjoyments are open to those whose faith is not the faith required of man in order to his salvation. Mr Combe's views of the natural laws are opposed to the views taught in Scripture regarding the necessity of spiritual influences and religious faith. When he speaks of "spiritual influences, independent of

* Constitution of Man, p. 4.

natural causes," he seems to think that spiritual influences are held by Christians to be *at variance* with natural causes. After a train of reasoning, on pages 89 and 90, he sums up his results thus: —"My inference, therefore, is, that the Divine Spirit, revealed in Scripture as a power influencing the human mind, invariably acts in harmony with the laws of organisation, because the latter, *as emanating from the same source*, can never be in contradiction with the former; and because a well constituted brain is a condition essential to the existence of christian dispositions."*

We cannot now stay to inquire into the influence which the brain's configuration and size may have on original character; but we ask, Is not He who made the brain able to influence the brain? Supposing, for the sake of argument, that Mr Combe's view were correct, we ask, If the mind can be affected only through the instrumentality of the brain, *cannot the Holy Spirit influence the brain itself*, and *thereby* influence the mind to which the brain belongs? He who made the organs of the faculties in the brain surely has power to control and to modify their action.

Mr Combe represents a well constituted brain as prerequisite to the attainment of the christian character. "It appears to me," he says, "that the American savages and native New Hollanders cannot, with their present brains, adopt Christianity or civilisation."† Now, allowing that there are original diversities in the tempers and general qualities of various tribes, and allowing that such

* Constitution of Man, p. 90. † Ibid. p. 49.

diversities are partly owing to the configuration and qualities of their brains, still it is true that Christianity is suited to every kindred and people on earth. We are not left to infer this from Scripture merely; we can point to facts. Christ enjoined his disciples to preach the gospel to every creature. And they found that all tribes could receive and obey it. Paul, after preaching the gospel in many lands, boldly declares, as the result of his experiments in applying this remedy of human ignorance and sin,—"I am not ashamed of the gospel of Christ; for it is the power of God unto salvation to *every* one that believeth: to the Jew first, and also to the Greek."* "Thanks be unto God, which always causeth us to triumph in Christ."†

The missionary enterprises of the present day have cast the strong light of successful experiment on this subject. "The *Negro*, through all his shades; the *Hottentot*, through all his varieties; the *Indians* of America, and *the natives of New Holland*, have all in our days been inspired with the love of God, through the gospel; and again we see, that in Christ Jesus there is neither Jew nor Greek, barbarian nor Scythian, bond nor free; but that Christ is all in all."‡ The South Sea Islanders, including tribes the most licentious and the most ferocious, have been subjected to the gospel of Christ. Tahiti, and New Zealand, and the islands where the illustrious Williams laboured, have all exhibited irrefragable proof that savage natures are not inaccessible to the ennobling and transforming influences of Christi-

* Rom. i. 16. † 2 Cor. ii. 24.
‡ Rev. R. Watson's Sermon on "Honour all men."

anity. The degraded Hottentot—the warlike Caffre—the wandering Boshman—have all received and obeyed with joy the gospel of peace.

Mr Combe refers to the Indians of North America. We have now before us a narrative of the labours and success of the devoted missionary, Brainerd, who proclaimed the gospel among these sons of the wilderness, about a century ago. This excellent man, though rather melancholic in temperament, severe in manners, and suspicious of every thing like lively, transitory religious emotion,—met with such success as filled him with adoring gratitude. In his diary, March 1, 1746, he writes thus, "I know of no assembly of Christians where there seems to be so much of the presence of God, where *brotherly love so much prevails*, and where I should take so much delight in the public worship of God, in the general, as in *my own congregation;* although not more than nine months ago they were worshipping devils and dumb idols, under the power of Pagan darkness and superstition. Amazing change thus effected by nothing less than divine power and grace! 'This is the doing of the Lord, and justly marvellous in our eyes!'"

These Indians had previously been addicted to "excessive drinking." Among the most distinguished of the converts, was an old man who had been a "remarkable drunkard, a conjurer, and a murderer."

Some of them were abundantly filled with the consolations of religion. And the evidences that the change effected in them was *morally* salutary, were strong and satisfying. Speaking particularly of one of the female Indians, who had

attained to a very happy state of mind, the missionary says, regarding her subsequent conduct, "She since appears to be a most tender, broken-hearted, affectionate, devout, and humble Christian, as exemplary in life and conversation as any person in my congregation."

The general character of his congregation was excellent. He says, "Drunkenness, the darling vice, was broken off, and scarce an instance of it known among my *hearers* for months together. The abusive practice of husbands and wives, in putting away each other and taking others in their stead, was quickly reformed; so that there are three or four couple who have voluntarily dismissed those they had wrongfully taken, and now live together in love and peace. The same may be said of all other vicious practices. The reformation was general; and all springing from the *internal* influence of divine truths upon their hearts, and not from any *external restraints*, or because they had heard these vices particularly exposed and repeatedly spoken against; for some of them I had never mentioned, particularly that of parting of men and their wives, till some having their conscience awakened by God's word, came, and, of their own accord, confessed themselves guilty in that respect."

The reformation was attended with an earnest desire of information on other subjects besides religion. He says, "Much of the goodness of God has also appeared in relation to their *acquirement of knowledge*, both in religion and in the affairs of common life." Again, "They have also acquired a considerable degree of useful knowledge in the affairs of common life, so that

they now appear like *rational* creatures, fit for human society, free of that savage roughness and brutish stupidity, which rendered them very disagreeable in their savage state. They seem ambitious of a thorough acquaintance with the English language, and for that end speak it frequently among themselves, and many of them have made good proficiency in their acquirement of it since my coming among them." He speaks of them as "desirous of instruction," and "surprisingly apt in the reception of it." They procured a school and a schoolmaster. He says, "The children learn with surprising readiness." In about four months some of them had learned to read in a *Psalter* or *Testament* without spelling. These happy results had followed very rapidly after the appearance of the missionary among them.

On June 19, 1746, he writes, "This day makes up a complete year from the first time of my preaching to these Indians in New Jersey. What amazing things has God wrought in this space of time for these poor people! What a surprising change appears in their tempers and behaviour! How are morose and savage Pagans in this short space of time transformed into agreeable, affectionate, and humble Christians! And their drunken and Pagan howlings turned into devout and fervent prayers and praises to God! They who were sometimes darkness, are now become light in the Lord."

The licentious and ferocious inhabitants of Tahiti were by the power of scriptural truth rendered temperate, pure, and peaceful. Numbers of the New Zealand cannibals were converted

into consistent Christians. Wherever Williams was permitted to proclaim the gospel, the savage islanders ere long embraced it and became *civilised*, as well as christianised. In South Africa, the triumphs of the gospel have been numerous and signal. Indeed, wherever the power of simple scriptural truth has been fairly tried, it has been successful. Even now the North American Indians are feeling the influence of christian truth. Within these few years past the Chippewa Indians have, in considerable numbers, embraced the doctrines taught among them by christian missionaries. The traveller on the highway sees cottages rising up, farms opening, and regular towns peering through the forests. He finds children at school,—the Bible venerated,—the Sabbath regularly observed,—and all the evidences of growing civilisation presenting themselves.

The *native* dispositions of barbarous tribes may be cruel,—Christianity tames and humanises them. The indolence of the untaught heathen gives place to increased activity, when their minds are aroused and made conscious of their high destiny by christian truth. The licentiousness of the degraded tribes is rebuked and restrained. In all lands and among all tribes, the gospel is still the power of God unto salvation. If Mr Combe's philosophy says, "This cannot be; the brains of the people must be improved before they can be civilised or christianised,"—it is his duty to re-examine both his data and his deductions. The facts regarding the actual success of christian missionaries among savages, the most ferocious, ignorant, and licentious, are too well known and

too well authenticated to be denied. He must not say that that which *actually has been done* is impossible. He must reconcile his principles as he best may, with facts that can admit no denial. And let him remember that one accredited case of real christian character, possessed by a person whose brain is phrenologically malformed, must either show his principles to be at the least partially incorrect, or else prove them to be erroneously applied.

Phrenology is yet immature. It is too much to maintain that science, so recent in its development, to be a system of completely unmixed and perfectly harmonious truth. As now expounded, though it may contain some truth, it may contain many errors. Those errors may cause disputes between the phrenologist and the christian moralist. Or, even were phrenology founded in truth, it may be wrongly interpreted or wrongly applied. This ought not to shock the minds of phrenologists. Mr Combe is compelled to admit that "phrenology is not an *exact* but an estimative science."* Why should they assume their own infallibility? Let them re-examine the points at issue between them and Christians. There may be means of reconciliation.

We do not know whether the phrenologists will or will not thank us for the suggestion; but we venture to think that, even on the principles which they hold, the influence of Christianity to elevate the character of rude nations before the configuration of their skulls is materially altered, may be consistently admitted. "Amativeness," "Ad-

* Preface to Fifth Edition of System of Phrenology, p. vii.

hesiveness," and "Philoprogenitiveness," in their legitimate exercise, are not prohibited either by Scripture or by reason. Where the means of subsistence are abundant, and the rules of morality are clearly understood, their power may lead to the rapid increase of the people, but need not be productive of any immoral consequences. Mr Combe himself tells us that "Combativeness" and "Destructiveness" may find vent in surmounting physical and moral difficulties. The christian missionary actually calls on the savage to encounter and surmount these difficulties. He also calls on him to employ his Constructiveness in forming for himself a more comfortable dwelling, and providing more suitable clothing. The means by which the surface and the bowels of the earth may supply him with hitherto unappropriated wealth being made known to the savage, his Acquisitiveness is legitimately gratified. By raising him to a much higher place in the scale of intelligence and worth, the missionary provides for the ample yet virtuous gratification of Self-esteem. Christianity supposes self-love when commanding us to love others *as ourselves*. Secretiveness, though powerful in the savage, may be innocently exercised in the way pointed out by Mr Combe, viz. in "suppressing feelings that might be improper to be manifested, and that might injure them with other individuals."* Cautiousness, which prompts us to shun danger, may find adequate exercise in the every-day employments of the people, and in the vigilance requisite to prevent their relapsing into vice. As

* Constitution of Man, p. 17.

for the Moral Sentiments, they would be called into an activity previously unknown, and all the Intellectual Faculties would be presented with new sources of gratification. All the inferior faculties being supplied with appropriate objects, may be safely gratified under the guidance of Veneration, Conscientiousness, and Benevolence, now invigorated, and of Intellect, now aroused from dormancy. Even the configuration of the brain would improve, and thus the preservation of the ennobled character acquired would be rendered more and more easy.*

We do not see in this *rationale* of moral improvement any thing either inconsistent with phrenology on the one hand, or with Christianity on the other. But, as has been already remarked, were it even conceded to the phrenologist that the intellectual and moral character of man can be improved only by means of a corresponding change in the action or qualities of the brain, there is nothing in Mr Combe's philosophy which warrants him to affirm that a supernatural influence exerted on the mind through the medium of the brain is impossible. Nor do we see that it could be held to be unscriptural to admit that, for aught we know, the Divine Spirit's influence in the application of saving truth to the human mind, may include some kind of action on the brain, altogether undiscovered and inexplicable by us, by which its functions are modified and improved. On such a subject we feel that it were presumptuous to speculate. Nor are we prepared, in the present state of our knowledge,

* See Combe's System of Phrenology, vol. i. p. 55, fifth edition.

to make the concession to which reference has been made. But were the data adduced by phrenology held to be sufficient to warrant that concession, the principle of Scripture, that the Spirit works by divine truth as his instrument, would not justify us in denying that he can or may influence the mind through the brain: that is, not independently of, but harmoniously with, natural causes. All that Scripture says regarding supernatural regenerating influence, seems to justify us in expecting such influence to *attend* the proper exhibition of christian truth; not to render the exhibition unnecessary, but to secure its efficacy. The natural effect of such truth so exhibited, is to give increased activity and influence to the superior faculties of the mind. Such activity seems to be in perfect harmony with the facts assumed in phrenology, in reference to the connexion between the mental phenomena and the corresponding activity of the alleged organs in the brain. The supernatural agency of the Spirit in the application of divine truth is not a power at variance with the natural causes affecting the mind, but simply a power giving augmented influence to such causes, in order to the improvement of the human character, in a mode completely correspondent with the human faculties.

To such supernatural influence, we may, in the sensible phenomena of the world, have no influence entirely similar; yet there are some striking analogies, remote indeed, but still illustrative of one grand fact or principle, viz. That, in each department of the world, there is the regular or occasional appearance of influence descending from a higher department. Gravita-

tion is modified in its effect by chemical agencies; heavy gases ascend to mix with light ones. Chemical agencies are controlled by electric powers; the affinity of sulphuric acid for potash is suspended by an electric current. Chemical and electric powers are modified by the powers of vegetable life; the living seed remains undecomposed, under certain circumstances, for thousands of years. Animal life resists the influence of the inorganic powers, and interferes with the arrangements of vegetable nature: "Around the borders of a volcano in the isle of Tanna, where the thermometer stands at 210°, Mr Forster found a variety of flowers flourishing in the highest state of perfection. Certain plants are by no means unfrequently traced in the boiling springs of Italy, raising the thermometer to 212° or the boiling point. M. Humboldt and M. Boupland, in travelling through the province of Quito, in South America, perceived fishes thrown up alive, and apparently in good health, from a volcano, along with water and heated vapour that raised the thermometer to 210°, being only 2° short of the boiling point."* Life interferes, in such cases, with the ordinary laws of temperature and affinity.

Now, are we to admit such interferences of superior with inferior powers, and then pronounce that the Supreme Power itself is precluded from interfering at all with the ordinary laws of mind, even in abnormal circumstances, which render such interference desirable, and when it may occur without subverting a single principle of the

* Animal Physiology, p. 3. Library of Useful Knowledge.

human constitution? To pronounce to this effect is not to obey, but to contemn, the dictates of sound philosophy.

The influence for which we have been pleading, is only in a very modified sense to be called *miraculous*. It is in one sense supernatural, but it is not *unnatural*,—that is, it is not opposed to nature. It may have its own laws, which, though at present beyond the ken of the human mind, may be a portion of the elements of a superior philosophy, which, in a future era, will be disclosed to angels and men. Meantime, all that we know of God—all that we know of his works—all that is revealed in his word—may be pled in favour of believing in a supernatural restoring and elevating influence on the human mind, put forth to render efficacious the other means employed in providence for man's moral and religious benefit, and exerted, not in violation of his corporeal and mental faculties, but in harmony with them all.

CHAPTER XII.

AFFLICTION VIEWED AS A MEANS OF MORAL DISCIPLINE.

Mr Combe manifests, on numerous occasions, a strong wish to find fault with religious persons—a great anxiety to put them in the wrong. To compass this end, he repeatedly goes out of his way. In no part of his book is this more evident than in his observations regarding the tendencies and the design of suffering. He labours to convict theologians and eminent religious professors, of ignorance and error, and brings his whole strength to bear on the point. The attempt, however, proves an egregious failure:—not for want of will to effect the purpose; for he turns again and again to it, scattering over many pages, observations plainly intended to have a bearing on the points he means to carry. And yet the design is, to some extent, concealed. We regret this. Open attack would have been more manly. It would, however, have been more easily repelled. Of this Mr Combe doubtless was aware. The importance of the subject would justify an extended examination; but we must content ourselves with treating it very briefly.

We shall first state those views which we feel entitled to defend in reference to the occasions and design of human suffering, and its use as a means of moral and religious improvement.

(1.) In all cases, human suffering is the consequence of sin.

(2.) In many cases, it is inflicted only on account of sin in general.

(3.) In many cases, it is also inflicted or aggravated on account of the personal transgressions of the sufferer.

(4.) In not a few, it derives depth and pungency from causes connected with the sins of immediate or remoter progenitors.

(5.) In some instances, suffering is incurred by virtuous conduct.

(6.) In most instances, if not in all, the sufferings which human beings endure in this world, though penal, have a benevolent design, and, when properly regarded, have a beneficent tendency.

Some of the views now stated, Mr Combe adopts; others of them he endeavours to oppose; and some of them he at times advocates, and at times opposes, just as seems to suit his purpose.

Our first position is regarded by Mr Combe as inadmissible and dangerous.

He says, concerning human suffering:—"If we shall imagine that, in some instances, it is dispensed as a direct punishment for particular transgressions, and in others only on account of sin in general, and with the view of ameliorating the spirit of the sufferer, we shall ascribe inconsistency to the Creator, and expose ourselves to the danger of attributing our own afflictions to his favour, and those of others to his wrath; thus fostering in our minds self-conceit and uncharitableness."*

We see no proper connexion between Mr Combe's supposition, and the consequences which he alleges will result from making it.

If some persons are involved by their own acts

* Constitution of Man, p. 78.

in particular transgressions (and who can deny this?) why may not suffering be, in their case, dispensed as a direct punishment for these particular transgressions? Even on Mr Combe's own principles, we are warranted to expect that punishment shall, on such accounts, be dispensed in that manner. Scripture and observation concur in teaching us to expect this. Personal sin brings personal suffering. On the other hand, there are undeniable facts which prove that, in some instances, suffering is dispensed only on account of sin in general. The sufferings of infants supply such facts. They do not suffer on account of their personal faults. Of this they are incapable. It cannot even be alleged that their sufferings always result from particular transgressions committed by their immediate or remoter progenitors, subsequent to Adam. They suffer from fire, flood, and famine, without the fault of their relatives. They suffer from endemic diseases, which no wisdom could foresee—no vigilance prevent. They thus suffer, even in cases in which the constitution transmitted to them from their parents is remarkably good. Such cases of suffering can only be attributed to sin in general—to the sinfulness of the race—not to any particular transgressions in which they are specially involved.

And when individuals who, having reached the period at which they become full moral agents, are actually chargeable with having committed personal transgressions, they yet may be involved in sufferings which assail the race because of sin in general, independently of individual conduct, and may become special sufferers, without any particular transgressions, either of their own

or of their relatives. The account given regarding the manner in which the Greek poet Æschylus met his death may illustrate our doctrine. It is said that the head of the aged author was bald, and that, one day as he was walking bareheaded in the fields, an eagle, mistaking his head for a stone, let fall upon it from a great height a tortoise which she had carried up, and whose shell she wished to break. History says that the poet was killed on the spot. By the ancients this account appears to have been generally believed, notwithstanding its marvellous character. We ask, Did Æschylus lose his life in consequence of his transgressing any particular natural laws? Instances essentially similar to that now alleged, occur in thousands. Tempests demolish the dwellings, and destroy the property, of the wise and good. Earthquakes swallow up the savage and the sage quite indiscriminately. The volcano is no respecter of persons. No sagacity nor vigilance can secure any of us against what are termed "*accidental evils.*" Mr Combe himself, with all his knowledge of the human constitution, and its relations to external objects, is liable to suffer from that "chance" which "happeneth to all."

On the ameliorating tendency of suffering, we would not disagree with Mr Combe, if he would only be content to keep in agreement with himself. To this point we shall shortly return.

As to the inconsistency which Mr Combe says we must ascribe to the Creator, we cannot perceive a shadow of occasion for doing so. If human beings differ in conduct, there is surely no inconsistency in subjecting them to different modes of treatment. Some of them are not chargeable with

the same particular transgressions that others of them have committed; why, then, should they all be dealt with in one and the same manner? To deal alike with different parties whose moral conduct exhibits wide diversities, is not the way to manifest perfect consistency. It is not the way in which God usually proceeds in governing the world. He does, in certain cases, bestow benefits on the evil as well as the good.* He gives to all men immensely more good than they deserve.† But this does not prevent the exercise of his justice. Still he is "righteous in all his ways." He does not always treat in the very same manner those who are obedient and those who are rebellious.‡ His perfect consistency forms an adequate reason for anticipating that he will act in different ways towards those whose moral characters widely differ.§ So Scripture teaches. So also does observation teach. So ought Mr Combe to teach. So would he teach if true to his own avowed principles. He tells us expressly, that "observance of the moral law is attended with external advantages, and infringement of it with positive evil consequences."‖

The rule is, that sin brings suffering, and the greater the sin, the greater the suffering. This is the rule. But God's goodness and wisdom introduce exceptions, or, at least, suspensions of the rule. He bestows blessings on the wicked man to lead him to repentance.¶ There is an adorable "richness" in his "goodness, and forbearance, and long-suffering." But he also

* Matt. v. 45. † Psal. cxlv. 9, 15, 16, &c.
‡ Psalm cxlv. 17; Rom. ii. 6–10. § Psalm cxlv. 20.
‖ Const. of Man, p. 59. ¶ Rom. ii. 4.

chastens those whom he loves, and scourges every son whom he receives. He does so "for our profit."* Here is profound wisdom in perfect harmony with sovereign goodness.

We are at a loss to see why Mr Combe should question these views, or bring objections against them. At times he appears to inculcate sentiments closely similar. His own doctrine is,—"that punishment serves a double purpose,—directly, to warn us against transgression; and indirectly (when rightly apprehended), to subdue our lower propensities, and purify and vivify our moral and intellectual powers."†

He also argues "that the world is arranged so as to favour virtue and discountenance vice."‡

His principles seem to involve the same consequences that are admitted by those religious persons whom he treats with contempt, as ignorant and erring—as nothing better than weak enthusiasts. Why is he so eager to involve in blame individuals whose virtue and piety have rendered them illustrious?

Hannah More is one of those whom Mr Combe has chosen to hold up to derision, although he distinctly admits her moral worth, and even speaks of her as "a woman so talented, so pious, and so excellent."§ He descants upon her religious experience, as stated in her letters to the Rev. John Newton, in which she says, "When I am in the great world, I consider myself as in an enemy's country, and as beset with snares; and this puts me on my guard." "Fears and snares seem necessary to excite my circumspection; for

* Heb. xii. 5-11.
† Constitution of Man, p. 78.
‡ Ibid.
§ Ibid. p. 39.

it is certain that my mind has more languor, and my faith less energy here, where I have no temptations from without, and where I live in the full and constant perusal of the most beautiful objects of inanimate nature, the lovely wonders of the munificence and bounty of God. Yet, in the midst of his blessings, I should be still more tempted to forget him, were it not for frequent nervous headaches and low fevers, which I find to be wonderfully wholesome for my moral health."

On this, Mr Combe thus comments:—

"This passage contains several propositions that merit attention: First, according to the natural laws, 'the most beautiful objects of inanimate nature,' and 'the lovely wonders of the munificence and bounty of God,' are calculated to invigorate the moral, religious, and intellectual faculties, in all well constituted and rightly instructed minds; yet Hannah More's mind had more languor, and her faith less energy amidst such objects, than 'when beset with snares.'" Well, where is the contradiction in this statement? Might not the conscientious and successful contest of Hannah More, whom Mr Combe confesses to have been "so talented, so pious, and so excellent,"—might not her contest with "fears and snares" arouse, excite, and animate her mind, so as to raise her above her ordinary level of energy in faith? Has Mr Combe studied human nature so ill, as not to have found out that there are some minds that are languid and powerless in the calm and the sunshine, but active and mighty in the storm,—that grow unusually vigorous when assailed,—that manifest highly augmented energy when battling with hostile

agencies, and then sink down when the conflict is past into their wonted state of comparative feebleness? He knows little of woman, who knows not that, though she is apt to betray mental weakness in her ordinary circumstances, she is, when called to make great efforts, fully able to put forth such energy as will carry her triumphantly through scenes of contest, to which she might be pronounced utterly unequal by one who has viewed her only in her usual and every-day phase of character. She may be timid in the drawing-room, and yet, absorbed by the love of her husband, she may be intrepid in the battle-field.

Pure and enlightened piety exalts moral courage, while, at the same time, it makes its possessor feelingly conscious of remaining mental weakness and minor moral defects.

It is just in such an individual as the amiable Hannah More, that we may expect such occasional exhibitions of aroused latent energy as those to which we have referred. "The lovely wonders of the munificence and bounty of God," though they failed not to awaken humble gratitude in her mind, yet did not excite her faith to such a degree of strength as that which it attained when, "beset with fears and snares," she cast herself on the unfailing protection of Him who neither slumbereth nor sleepeth,—Him who said to one in similar circumstances, "My grace is sufficient for thee; for my strength is made perfect in weakness."

Mr Combe, in his comment on Hannah More, says, "Secondly, according both to the natural laws and Scripture, 'evil communications corrupt

good manners;' but 'when in the great world,' and 'in an enemy's country,' her faith was improved."

On this passage we remark that, both according to the natural laws and Scripture, "evil communications corrupt good manners," only in such persons as embrace those communications, not in such as condemn and oppose them, as Hannah More earnestly did. Scripture is altogether on the side of Hannah More. Regarding the nature and effects of temptation, James has given us, in his epistle, statements which, for profundity and perspicuity, are unequalled in human language.* He does not tell us that we must be injured "when beset with snares," "when in the great world," and "in an enemy's country." He does not tell us that our faith must then droop and languish. On the contrary, he says to the followers of the Redeemer,—"My brethren, count it all joy when ye fall into diverse temptations, knowing that the trying of your faith worketh patience."† Hannah More knew this. Until Mr Combe know more regarding the nature of the Christian's experience under temptation, his wisdom will be silence.

Mr Combe adds—"Thirdly, 'nervous headaches and low fevers' are the consequences of departures from the organic laws, and are intended to reclaim the sufferer to obedience, that the pain may cease; yet she found them wonderfully wholesome for her moral health, and they prevented her from forgetting God."

We ask, why should they not be found wonder-

* See James, chap. i. † James i. verses 2, 3.

fully wholesome for the moral health? Nervous headaches and low fevers, according to Mr Combe's own showing, fall under the category—"punishment," and punishment, as he himself tells us, "serves (when rightly apprehended) to subdue our lower propensities, and to *purify* and *vivify* our *moral* and *intellectual* powers." Mr Combe's principles being assumed, no other conclusion can be reached, than that nervous headaches and low fevers ought to promote moral health. To make the matter plainer, let us throw it into the form of a syllogism, or regular logical argument.

Punishment is intended to promote moral health, by subduing our lower propensities, and purifying and vivifying our moral and intellectual powers:

Nervous headaches and low fevers are punishment:

Therefore, nervous headaches and low fevers are intended to promote moral health, by subduing our lower propensities, and purifying and vivifying our moral and intellectual powers.

It is evident that Mr Combe has gone out of his way to attack the principles of christianity in the person of Hannah More; and that in the eagerness which he manifests to find matter of condemnation against the eminently pious, he deserts his own peculiar department of inquiry, and contradicts his own avowed principles. These principles afford—we do not say a complete—but still a plausible explanation of the mental phenomena to which he refers, without calling in the aid of "disease or errors of education," by which the feelings are perverted, and the judgment is obscured.

Hannah More is not the only pious lady whose experience Mr Combe holds up to view in illustration of the ignorance regarding mental phenomena, which he professes to dissipate by the light of phrenology. He speaks in a similar strain regarding the mental sufferings experienced at one time by the lady of the Reverend Ebenezer Erskine. There is something not very delicate in thus disclosing the private religious exercises, and the agonizing feelings which distressed one, whom even Mr Combe pronounces "a woman of blameless life," so as to expose them to the irreverent gaze, and the heartless derision of the profane. Strong reasons indeed will be required to justify this rude uplifting of the veil which respect for the pious dead would leave untouched. But let this pass. Mr Combe quotes the Diary of Mr Erskine, in which he says:—"For a month or two the arrows of the Almighty were within her, the poison whereof did drink up her spirits; and the terrors of God did set themselves in array against her." He (Mr Erskine) called in the assistance of some neighbouring clergymen to join in prayers on her behalf, and (as Mr Combe tells us, on the authority of Mr Erskine) she was induced to pray with them; but "she still continued to charge herself with the unpardonable sin, and to conclude that she was a castaway." "Such feelings," adds Mr Combe, "occurring in a woman of blameless life, clearly *indicate diseased action in the organs of cautiousness.*" "Before she fell into these depths, she told me," continues Mr Erskine, "that the Lord gave her such a discovery of the glory of Christ as darkened the whole creation, and made all things appear

as dung and dross in comparison of him." "These expressions," adds Mr Combe, "indicate *morbid* excitement of the organs of wonder and veneration. She subsequently recovered her mental serenity, and her husband treats of the whole phenomena as purely mental and religious. He, however, afterwards incidentally mentions that she was subject to bad health, and that melancholy was a great ingredient in her disease." "We know," observes Mr Combe, "that melancholy is a diseased affection of the organs of cautiousness."

Thus coolly does Mr Combe treat the whole phenomena as purely physical—as evidently resulting from cerebral disease. We do not vouch for the accuracy of Mrs Erskine's views when she regarded herself as "a castaway." In this particular, she doubtless adopted a very mistaken view of her character and relation to God. Nor do we positively assert that her mental distress was entirely independent of nascent morbid cerebral affections. The mind and the body act and react on each other. Mental causes influence the state of the brain, and often give rise to morbid affections of that organ. On the other hand, morbid states of the brain interfere with, and greatly modify, the mental phenomena. It is unphilosophical to attribute every intense feeling to causes purely mental and religious. It is equally unphilosophical to attribute every such feeling to causes purely physiological and corporeal. It was possible for Mr Erskine to attribute too much of Mrs Erskine's distress to causes purely mental and religious. Mr Combe evidently attributes too little to these causes. For aught Mr Combe has proved to the contrary, the

origin of Mrs Erskine's distress of mind may have been entirely mental and religious. Her case may have been one of those in which the mental influence is the primary and the prevalent one, and the corporeal affections are merely secondary and entirely subordinate. Indeed, religious alarm appears to have given rise to the entire symptoms. The appropriate religious remedies soon proved effectual. For "that same day," to use the words of Mr Erskine, "though she did not find full clearance, she had more quiet and composure of mind. Within some few days after this, though clouds were still around her, the Lord quieted the storm. He gave her a *sweet serenity* of mind, and helped her to a holy, tender, and circumspect walk, and an humble waiting upon him in the way of duty, both in public and private, *for many years.*"* As Mr Combe tells us, "she subsequently recovered her mental serenity." We have no evidence that her distress was the result of cerebral disease, as Mr Combe confidently assumes it to have been. The evidence seems rather to warrant the opposite conclusion; for, had cerebral disease been the cause of her distress, its removal by religious means would in all probability have been only transitory; but we are informed, on the contrary, that her sweet serenity of mind lasted "*for many years.*" It was not till about twelve years after what Mr Erskine calls "her deliverance," that she sunk into that state of trouble in which he tells us that "melancholy was a great ingredient in her disease."†

* Life and Diary of the Rev. Ebenezer Erskine, p. 288.
† Ibid. p. 289.

By confounding these two distinct and remote periods of mental distress, Mr Combe gives a show of strength to his allegations. Between these periods, there was, in reality, a long and happy interval. Concerning her state of mind during that interval, Mr Erskine gives us satisfactory information. He says, "After this," (her deliverance), "she and I lived *comfortably* together for many years, her conversation and company being most savoury, edifying, and *helpful to me.*"* We might, perhaps, allowably suspect that morbid cerebral action may have had a share in aggravating her mental distress, but we have no means of proving this to have been actually the case. Mental stimuli may for a time affect us either painfully or delightfully, without leaving behind them permanent cerebral effects—without originating any permanent morbid condition in the brain. Even if given phrenological organs, such as those of Cautiousness, are preternaturally excited for a time, so as to endanger the equilibrium of the faculties, some antagonist organ, such as that of Hope, may subsequently be excited into activity, so as to preserve or restore that equilibrium. From transitory mental conditions, though occasionally recurring, it is therefore quite unwarrantable to infer the existence of organic disease in the brain. In Mrs Erskine's case, they do not appear to have recurred for many years.

It is sometimes difficult to trace the originating causes of mental states. At other times it is perfectly easy. When a ruined merchant becomes

* Life and Diary of the Rev. Ebenezer Erskine, p. 289.

melancholy, we do not look to his skull, but to his ledger and his letter-book, to discover the cause of his mental distress. His friends, if wise, instead of applying blood-letting or blistering to relieve his brain, will kindly assist him to pay his debts, or to meet his creditors. His organs of Cautiousness may be unduly excited, but, to bring them to their natural and healthful condition, the aid of his banker will be far preferable to that of his physician. We, in such cases, know the cause, and know the remedy of the mental distress—the "melancholy which is a great ingredient in the disease."

When causes having a relation to religious concerns—the most important of all human concerns—when they induce melancholy, we know the remedy. Mr Erskine knew this remedy, and, like a wise man, promptly applied it. That remedy is found in believing prayer, which is able to dissipate all those species of melancholy which arise from causes purely mental and religious. It would be most unphilosophical to apply any other remedy in such cases, to the neglect of this. "Is any man" thus "afflicted, let him pray," is a counsel as philosophical as it is scriptural.

To remove the effects, we remove the causes, or bring into play causes able to control and counteract them. What else *should* we do? If Mr Erskine had been as well versed in phrenology as Mr Combe himself is, what other course could he have wisely pursued than that which he actually selected? With all our boasted physiological discoveries, what means have we of operating on the organs of cautiousness *directly*?

Is there any other way of lulling them to repose than either by withdrawing the stimuli, which have roused them into undue activity, or by calling into augmented activity some counteractive faculty or faculties? Mr Erskine believed that his wife's distress originated in causes of a mental and religious sort. He therefore applied mental and religious remedies. Mr Combe intimates that the distress of the lady's mind had a different cause,—a physical one. Where is his proof? Causes of either sort *might* produce the phenomena. The question is, which sort did actually produce them? Surely Mr Erskine had better opportunities than Mr Combe has had of ascertaining to which class of causes Mrs Erskine's distress was attributable. The husband was in the sufferer's company daily at the time—he witnessed her deportment,—heard her words,—observed the indications of emotion,—marked the rise, the progress, and the termination of the affliction. The philosopher, scantily supplied with memoranda of the case, without once seeing the patient, or hearing her, without receiving one epistle from her, or so much as examining her skull, above a century after her death sits down to make up an explanation of her case. Which is the most competent authority regarding the occasion of Mrs Erskine's distress,—Mr Erskine? —or Mr Combe?

There is not the slightest occasion for the insidious apology offered for Mr Erskine in the following passage:—

"At the time when Mr Erskine lived and wrote, the physiology of the brain was unknown: the occurrences he describes had a real existence,

and he had been taught to ascribe them to the agency of the divine Spirit, or of the devil, according to their different characters. He is, therefore, not deserving of censure, for the errors into which he unavoidably fell." *

This is all very sweet; but there is poison in the honeyed potion. With ostentatious forbearance Mr Erskine is allowed to pass without censure. He is kindly pitied for the errors into which he unavoidably fell! He is condescendingly commiserated, on account of his having lived at a period prior to that, when the light of phrenology arose upon the world! But it seems *we* should know better, for Mr Combe adds, "now that the facts which he describes, and analogous occurrences in our own day can be traced to diseased action of the organs of mind, we are authorised to view the providence of God in a different light." In other words, "The case of Mrs Erskine was a case of cerebral disease." "Her brain was disordered." "Analogous occurrences in our own day can be traced to the same cause." We beg to remind Mr Combe that there is a difference between *can be* and *must be.*

Melancholy can sometimes be traced to disease in the brain. But it often can be traced to other causes,—to causes which affect the mind directly, such as grievous pecuniary losses,—disappointed love,—frustrated ambition,—blighted prospects of gain,—and distressful views of religious concerns. In not a few instances, mental distress is to be traced to causes of a spiritual nature,—

* Constitution of Man, p. 39.

causes in which we still dare to believe, after all the discoveries that physiologists have made; because we find these existences evinced, not only by the satisfactory testimony of Scripture, but also by the evidence of credible human experience.

Why should it be thought a thing incredible, that God who made, and who sustains in activity the human soul, and its seat or organ,—the brain,—can influence them? Men can influence each others minds. Why should it be thought impossible that beings, of an order originally superior to man, should influence our minds also?

We cannot stay to investigate this matter fully. We need not. Mr Combe, instead of adducing any thing which proves the non-existence of spiritual influences, is compelled to admit their existence. He tells us that "the divine Spirit, revealed in Scripture, *as a power influencing the human mind*, invariably acts in harmony with the laws of organisation."* Here the reality of the divine Spirit's influence is plainly admitted. Here we are told that this power "acts,"—acts when "*influencing* the human mind." Surely we are entitled to anticipate that some effects will be produced by this *influencing power*. Such effects ought to be somewhere discoverable. Religious persons believe that effects resulting from the influence of this power are experienced by human beings. What is there irrational in this belief? Why should we, with Mr Combe, admit the reality of an influence, and admit its *acting*, and yet deride those who believe in its efficaciousness? Let us be consistent.

* Constitution of Man, p. 90.

On the subject of intense feeling regarding religious subjects, there may be various errors entertained. There is the error of ascribing all mental phenomena to spiritual influences. That error we renounce. We do not wish "to mistake the excitement and depression of disease for the influence of the Holy Spirit, or the agency of the enemy of mankind." On the other hand, there is another error,—the error of ascribing all mental phenomena to physiological influences. Will Mr Combe join with us in condemning this error? He ought to do so. Let him avoid both errors. Let him guard against ascribing every mental phenomenon solely to physiological causes. Let him not ascribe to cerebral action, as their originating cause, states of mind that were induced at first by spiritual influences. If Mr Combe denied the existence of spiritual influences, we would argue in a different manner with him. As he admits their existence we have a clear right to demand that he proceed in consistency with the admission. He should agree with himself.

Let each cause have its due place assigned to it. Let not the physiological influences be forgotten. Let not the spiritual agencies be disregarded.

In studying vegetation, we have to do with causes of various sorts. The seed—the air—the sun—the shower,—all are requisite to the production of the phenomena. It were unphilosophical to disregard any one of them, for they all have their place and influence in producing those phenomena. When I discover that light and heat affect the growth of a plant, I am not en-

titled to infer that air and moisture have no influence. Another person who finds moisture and air concurring to promote vegetation, would also err egregiously if he concluded that these were the *only* causes that affect it, thus disregarding the influence of ethereal agency—the agency of light, heat, and electricity. Both species of causes are requisite. Error must result from overlooking either species—the ponderable or the ethereal.

In studying the phenomena of mind, we have likewise to do with causes of various sorts. The soul—the brain—the external world—knowledge—social sympathy—mental stimuli—and spiritual agency, ought each to have its share of our regard, for each of them has its share in producing the observed mental manifestations. Philosophy and religion unite in demanding that we assign to each originating or modifying cause its real place, and its proper share of importance, when we are engaged in the task of explaining the phenomena.

The flower is not more completely dependent for its growth and beauty on the solar light and the electric influence, than is the human soul for its growth in virtue, and its moral loveliness, on celestial light and the influence of the Holy Spirit.

Mr Combe speaks of the views which we defend as fostering self-conceit and uncharitableness. Why should these views have any such effect? Scriptural piety is founded on genuine and deep humility. It excludes all boasting. They who obey the Saviour, so occupy themselves with casting the beam out of their own eye as to

have little time left to consider the mote in their brother's eye. They judge themselves more severely than they judge their fellow-men. The two christian ladies to whom Mr Combe refers, evidently judged themselves with great severity. The one lamented her liability to forget God, her ingratitude to him, her wandering thoughts, and her other religious defects. The other causelessly charged herself with the guilt of committing the very worst of all sins. And we have no proof whatever that they cherished towards their fellow-creatures any uncharitable dispositions or thoughts. If Mr Combe's illustrations, therefore, afford proof of any thing, they afford proof that he is in error, when he alleges that the sentiments which he opposes foster uncharitableness and self-conceit. These sentiments do not, as he contends, incline those who hold them to attribute their own afflictions to God's favour, and those of others to his wrath. Let him look to the consequences of his own suppositions; they are monstrous and dangerous.

According to Mr Combe, suffering is punishment; punishment for violating the laws established by the Creator; punishment inflicted for the violation of those laws either by the sufferers or their progenitors.

He maintains that the natural laws, physical, organic, and moral, "operate *independently of each other*;" "that each *requires obedience* to itself;" and "that each, in its own specific way, rewards obedience and punishes disobedience;" thus making them all rules of human conduct. He calls them all "divine institutions," and maintains that human beings are happy in proportion

to the extent to which they place themselves in accordance with them all.* He tells us "that obedience to each of them is attended with its own reward, and disobedience with its own punishment."† Now, as we never suffer at all in this world but through the operation of some natural law, and as no natural law punishes any conduct but *disobedience* to itself, it follows that we never suffer in this world at all but for disobedience. And as such suffering is punishment, it follows that all human suffering is punishment. Also, as these laws are "divine institutions," all suffering must be *divine* punishment; punishment for disobedience to *divine* laws; for violating *divine* institutions. Further, as each natural law is independent and *requires obedience* to itself, and being a "*divine institution*" has a divine authority and sanction, human obedience is a very complicated and perplexing affair. It is so complicated and perplexing as to involve positive contradictions. The very same act *is required* by one law and forbidden by another law,—both laws being *divine*.‡ We sometimes cannot obey both the organic and the moral laws. Now, this view of matters involves gross absurdity, and must therefore, however plausible, embody some important error, which the observations that follow may enable the reader to detect.

* See Constitution of Man, p. 6. † Ibid. p. 9.
‡ Matt. x. 38, 39.

CHAPTER XII.

THE SAME SUBJECT CONTINUED.

BEFORE proceeding to point out the important error involved in Mr Combe's theory, it is necessary to premise that the advantages connected with discovering, remembering, and obeying the natural laws (which, though neither antecedently necessary* nor absolutely invariable, are general, and, in ordinary circumstances, quite unbending), are both numerous and great. Correspondingly numerous and great are the evils arising from their infringement; but the manner in which Mr Combe has insisted upon this head—appearing to supersede Scripture and spiritual influence, and to oppose certain important scriptural doctrines—has justified suspicion and alarm. It may have led some timid Christians to deny or slight much in the pleadings of Mr Combe that merited respectful attention. We shall not imitate those well-meaning but injudicious persons. We willingly concede much that Mr Combe demands on this point.

Man as a physical being, in order to secure the advantageous, and to shun the injurious, operation of those laws in reference to himself, should take proper care to place himself in harmony with them, by a due exercise of the physical and mental powers bestowed upon him by his Creator.

* We mean that the natural laws are not the result of any antecedent necessity, but depend on the Divine will.

In order that he may do this, it is desirable that he understand, "1*st*, The physical laws themselves as revealed by mathematics, natural philosophy, natural history, chemistry, and their subordinate branches; 2*dly*, The anatomical and physiological constitution of the human body; and, 3*dly*, The adaptation of the former to the latter."*

All men ought to endeavour to learn what these laws are, and when they have learned them, ought to act in conformity with them as far as is possible. Those who improperly and imprudently disregard the physical laws, of course must suffer for their imprudence. They neglect to attend to some of the Creator's arrangements —arrangements that are on the whole boundlessly beneficent, and, so far, they are justly blameable. Their suffering is just in itself, and its tendency is undeniably advantageous to God's creatures taken as a whole. And yet, as many have not had the means of acquiring a knowledge of the physical laws; as the utmost circumspection may not in all cases secure our complete exemption from the distresses they occasion; and as the observance of other laws of a superior nature and obligation is not always compatible with the rigid observance of the physical laws, the suffering we endure in consequence of their operation, is not capable of being entirely resolved into *punishment* for their non-observance.

It is sometimes noble and even necessary to dare the evils which are suffered from the unbending operation of physical laws. The three

* Constitution of Man, p. 12.

Hebrew youths who dared to disobey the commandment of the idolatrous Babylonian monarch, though in sight of the burning fiery furnace, which by his orders had been prepared for such as might dispute his will, acted nobly. They were delivered; for the Deity can suspend the natural laws. But had they been consumed, their conduct would not have been the less noble. We must obey the physical laws, only when we can do so without violating the more important superior laws given by the Creator. Sufferings incurred in the observance of these superior laws are not in strict propriety of language punishments. Sufferings are punishments only when carelessly or needlessly incurred.

The organic laws, or those which relate to the production, growth, health, decay, and death of organised creatures, ought also to be observed under the same limitations as are due to the physical laws. Our own health, strength, corporeal comfort, activity, mental soundness, and social usefulness depend to a great extent on the knowledge and careful observance of those laws. So do the health, life, vigour, and mental characteristics of our offspring. Such laws, therefore, should be carefully studied and duly observed. Enlightened attention to them will doubtless contribute much to the augmentation of human happiness. On this point it is unnecessary to dwell. It admits of no dispute. Here Mr Combe gives much valuable instruction, which we wish no one either to disregard or depreciate. We join with him in saying,—"It is undeniable that in innumerable instances, pain and sorrow are the direct consequences of our own misconduct; at

the same time, it is obviously benevolent in the Deity to render them beneficial, directly as a warning against future transgression, and indirectly as a means of leading to the purification of the mind." Yet these laws may, in certain instances, be properly disregarded; at least we may be right in acting in such a way as will infringe them. Grace Darling was rendered illustrious by nobly braving the surges of the tempestuous ocean, endangering her own life to rescue others from a watery grave. She scorned to be withheld from her generous exertions by the regard due to the well-known organic law,—that a human body submerged beneath the waves must soon be bereft of life.

When the laws of piety, justice, and benevolence will allow us to pursue a course of conduct entirely accordant with the organic laws, the voluntary neglect and violation of them involve disobedience to our Creator, who has instituted these laws for the general good of his universe—for the good of ourselves, and other sentient creatures. But the suffering which we incur by obeying the moral in opposition to the organic laws, is not punishment strictly and properly so called. By pursuing the opposite line of conduct, we may sometimes attain bodily enjoyment. Such comfort, however, when so secured, is not reward. Guyon, the heroic French surgeon, who died in consequence of his dissecting the body of a man who had fallen a victim to the plague, was not a transgressor in the proper sense. He deemed the proceeding necessary in order that the cause of the fearful malady might be ascertained, and its ravages among his countrymen brought to an

end. He acted a part worthy of a man—a patriot—a philanthropist—a Christian; and yet he died because he dared to disregard the operation of what he held to be an organic law. To him death was not the punishment of that action.

According to Mr Combe's theory, a human being may subject himself to divine punishment by doing what is morally right and excellent.

Mr Combe refers, with well merited approbation, to the conduct of the late Admiral Lord Exmouth, who heroically rescued from a watery grave the crew of the Dutton, which was wrecked near Plymouth.

"I saw," says the noble lord—"I saw the loss of the whole five or six hundred men was inevitable without somebody to direct them, for the last officer was pulled on shore as I reached the surf. I urged their return, which was refused; upon which I made the rope fast to myself, and was hauled through the surf on board—established order, and did not leave her until every soul was saved but the boatswain, who would not go before me. I got out safe, and so did he, and the ship went all to pieces."

Lord Exmouth succeeded in his heroic attempt. His conduct merited reward. It was rewarded by the joyful approbation of his own heart, and the just applause of his fellow-men. He obeyed the moral law—"Thou shalt love thy neighbour." He hazarded his life. He exposed himself to the risk of suffering through the operation of the physical and organic laws, when he nobly dared the danger from which the officers of the vessel shrank appalled. He attempted the rescue, and

he triumphed. But it might have proved otherwise. Lord Exmouth might have perished. Had he perished, the nature of his conduct would not have been at all different from what it actually was. There would not have been the less of moral goodness and true heroism in it. He succeeded, and is justly praised. Had he failed, he could not have been justly blamed. He might have rescued the crew, and lost his own life, by remaining to the last on the wreck. The happy objects of his courageous benevolence, as they stood dripping on the beach, might have seen the pale and lifeless corpse of their benefactor thrown towards them by the remorseless waves. The like has happened. Had it happened, the noble Exmouth would not have been less worthy of the approbation that he received than he actually was when he escaped from the surf.

Had he perished, Mr Combe must have added his name to the catalogue of those who suffer because they disobey the natural laws, and to whom suffering is dispensed "as a direct punishment for particular transgressions." But where would be the propriety of thus making distinctions, when there could be no moral difference whatever in the nature of the conduct in question? Results do not alter the moral character of the conduct from which they flow.

An incident which recently occurred on one of our British railways, exhibits a result directly the reverse in character of that which presented itself in the case of Lord Exmouth. We give the account as it appeared in several newspapers. "*Heroic conduct on a Railway.*—Last Thursday, a most providential escape occurred on a railway

connected with Bishopwearmouth iron works. The iron works in question extend over a vast extent of country, and for the purpose of a speedy transit from one part to the other, railways have been established, one of which is formed on an inclined plane, down which the heavily laden waggons are propelled at a fearful rate. On the morning of the above day, while one of the trains of waggons was passing down, two very old women, each being nearly seventy years of age, labouring under defective sight as well as hearing, got on the line. A few minutes more, they both must have been inevitably crushed to death. Their perilous situation was, however, witnessed by Mr David Holgrove, the overlooker of the works, who in an instant dashed forward and seized the two females, whom he threw off the line, and out of the way of danger. Unfortunately, the engine at this instant came up, which knocked Mr Holgrove down, and he was picked up as dead. He was instantly conveyed to one of the buildings in the vicinity, and medical aid was sent for, when, upon examination, it was discovered that he had sustained several contusions about the head, that both his arms were broken in two places, and also one of his legs, besides other injuries about the body. It is supposed that some part of the train must have gone over the limbs. Although so severely and dangerously injured, hopes are entertained of his recovery. The two females escaped without the slightest injury."

In this case the deliverer became a sufferer. He became a victim to his generosity. The laws of gravity and motion were not suspended in his

favour. Just after he had rescued the two helpless aged females, onwards rushed the ponderous train of vehicles and crushed his limbs beneath its formidable mass. The females he saved; himself he could not.

Was Mr Holgrove a transgressor? Did he disobey the compassionate Creator? Did Mr Holgrove violate this law in the benevolent and successful attempt he made to rescue two helpless fellow-creatures from a dreadful death?

According to Mr Combe, Mr Holgrove's suffering was a distinct and signal case of punishment —of divine punishment—for infringing important physical laws. He was a transgressor, a flagrant transgressor; he merited, as well as met, severe and exemplary punishment. He suffered, according to Mr Combe, that he and others might not in future similarly sin!!

Great must be the error in principle that legitimately leads to such a conclusion—to an inference so monstrously false as this. That error is part of Mr Combe's grand principle, viz.:— "The independent existence and operation of the natural laws of creation"—physical, organic, and moral. These laws, which exist, and are carried into effect, independently of each other, he confounds with laws of human conduct. Now, it is only the moral laws that imperatively regulate our conduct. Obedience to the first two classes is only prudential, and often has nothing moral in it. Moral laws should be obeyed at all times, and in all circumstances. Physical laws we may evade or disobey in multiplied instances, quite unblameably. That we may fully obey the moral laws, we frequently must, to some ex-

tent, disregard the physical laws. Mr Holgrove's case is only one of a multitude. We repeat it—Physical laws ought not to be confounded with laws of human conduct. These we always must obey; those we may often, without deserving blame, boldly disregard. By commingling distinct classes of natural laws, Mr Combe introduces into his system dangerous error and gross absurdity. The same remarks, to some extent, apply also to the organic laws. These we may often, to a large extent, properly disregard. Obedience to them, though generally *prudent*, is not universally *imperative*. It is a species of *wisdom;* but it may or may not be *duty*. There may be moral heroism in daring to incur the evils which result from the operation of the organic laws. Having already dwelt on this point, it is unnecessary to dilate upon it here. Suffice it to name as illustrations of our position the prince of British philanthropists, the immortal Howard, who fell a victim to the natural law of contagion, when prosecuting his labours of enlightened compassion in a far distant land—the apostle of the Gentiles, who was "in deaths oft," not counting his life dear to him, so that he might finish his course with joy,—and we would, in devout reverence, add, the Divine Saviour himself, who was "a man of sorrows"—who "suffered for us,"—enduring the cross—voluntarily enduring it—in all its indescribable agonies, sustained by "the joy that was set before him"—the joy of promoting the divine honour in the salvation of human beings.

Should it be contended that the sufferings of the Saviour, arising from his devotedness to the

enterprise of human salvation, were altogether peculiar and unparalleled, and that they cannot fitly be adduced as having any bearing upon the ordinary obligations of men,—we answer, that his self-denying and self-sacrificing benevolence is held up in Scripture as a model for the imitation of his followers. "The mind is to be in them which was also in Christ Jesus;" and they are to be ready, in token of their christian love, "to lay down their lives for the brethren."

We maintain, therefore, that when the apostle of the Gentiles, and the philanthropic Howard, to accomplish great and glorious ends, disregarded the suffering that may be incurred under the operation of the organic laws, each of the noble sufferers acted a part heroically good. It is absurd to place them in the same category with those who bring upon themselves disease and death by their violations of the moral laws. In that category, however, they must be placed by those who implicitly follow the guidance of Mr Combe.

CHAPTER XIII.

ON THE ALLEGED POSSIBILITY OF DEDUCING A SYSTEM OF MORALITY MERELY FROM THE NATURAL LAWS.

THE number of the natural laws seems to be incalculable. Mr Combe says,—"Every natural object has received a definite constitution, in virtue of which it acts in a particular way. There must, therefore, be as many natural laws as there are distinct modes of action of substances and beings viewed by themselves." Now, the number of substances and beings, including the simple and the compound, the inorganic and the organic, is beyond our powers of enumeration. Mr Combe adds,—"But substances and beings stand in certain relations to each other, and modify each other's action, in an established and definite manner, according to that relationship; altitude, for instance, modifies the effect of heat upon water. There must, therefore, be also as many laws of nature as there are *relations* between different substances and beings."* As each substance must have one relation, at the least, to every other substance, it is evident that the total relations of substances and beings to each other, must be innumerable. In consistency with this multitudinous amount of the natural laws, Mr Combe admits,—"It is impossible, in the present

* Constitution of Man, p. 9.

state of knowledge, to elucidate all these laws; numberless years may elapse before they shall be discovered," &c.*

Well, then, what are we in the meantime to do? Mr Combe says,—"Knowledge of the constitution, relations, and capabilities of sublunary things and beings, is indispensable to the proper exercise and direction of the superior powers of the mind."

But how, we ask, can this be attained? In a system so extensive and complicated, how are we to proceed to gain this indispensable knowledge? Our life is brief. Can we have time to learn all these innumerable natural laws—of all those endless diversified substances and beings, with all their mutual relations?

Pope truly says:—

"Life can little more supply
Than just to look about us and to die."

It is evident that we never can acquire, retain, and apply the knowledge of all these laws. The more we know of them the better; but it must be quite impossible to observe them all. We therefore need another rule of conduct beside the natural laws. Even a knowledge of our own constitution includes so much, that a lifetime would be insufficient to become familiar with all its facts and their relations. What are the busy and overtasked multitudes to do then? How are they to become possessed of an appropriate and adequate rule of conduct? "Learn phrenology," says Mr Combe. "It is the guide." Is it an adequate and available guide?

* Constitution of Man, p. 9.

CHAPTER XIV.

CLAIMS OF PHRENOLOGY TO BE THE CHIEF RULE OF LIFE AND CONDUCT.

We are far from wishing to interdict or deride the study of the human head. In favour of this study much may be urged. We are strongly disposed to admit, that the grand leading principles of phrenology are supported by plausible evidence. A certain size, and a certain configuration of head, mark idiocy—another configuration strongly indicates superior intellectual power. A large posterior lobe seems to indicate inherent tendency to animal passion. Considering the intelligence, number and industry of the phrenologists, we have reason to anticipate that they will make useful discoveries. It would ill become us to treat with contempt the attainments they have already made. Mr Combe—in himself a host—is aided by a large, respectable, and gathering body of talented auxiliaries. In their legitimate sphere of labour, we wish them all possible success. Our complaint is, that they are not content to keep to their own department. Phrenology is yet in its infancy. Let not phrenologists be unduly confident. In judging of their peculiar principles, we might refer to the very extensive scepticism of physiologists regarding the soundness of the basis on which they have been constructed—and to the deliberate rejection of the

whole system by many competent judges; but we would willingly view it in the most favourable light, and consult the statements of its friends, rather than those of its enemies.

No phrenological authority is worthy of more respectful attention than Mr Combe himself. In his various works, he exhibits, in numerous modes, the great value he sets on phrenology. From him, then, let us learn the extent to which this department of information merits the name of a science. We quote his matured opinion, given in the last published edition of his System of Phrenology. He says, "Phrenology is not an *exact*, but an *estimative* science. It does not resemble mathematics, or even chemistry, in which measures of weight and number can be applied to facts; but, being a branch of physiology, it, like medical science, rests on evidence which can be observed and *estimated* only. We possess no means of ascertaining, in cubic inches, or in ounces, the exact quantity of cerebral matter which each organ contains, or of computing the precise degree of energy with which each faculty is manifested; we are able only to *estimate* through the eye and the hand the one, and by the intellect the other."* These admissions are very important. They will assist us in forming an estimate of the conclusions drawn by phrenologists.

First, then, Neither the quantity nor the weight of the matter in any cerebral organ can be *ascertained*. It may be *estimated;* but the estimate may not be exact. This does not preclude error regarding the *size* of an organ.

Secondly, The activity of each organ can only

* Fifth Edit. of Syst. of Phren., Edin. 1843, Preface, p. 7.

be *estimated* not *ascertained.* Error regarding the *activity* of an organ is not precluded. The eye may err, and so may the judgment, regarding the temperament. Now, in order to learn the efficiency of an organ, we must combine *activity* with *size.* Each of these factors is *estimated.* Neither of them is weighed or measured. The product must partake of the combined vagueness of both factors.

Then, thirdly, we have the *power* of the organs, resulting chiefly from their total size.* Nor is this all. Other elements enter into the case; for,

Fourthly, "In some individuals, the brain is of a finer texture than in others; and there is then *fineness* of manifestation, which is one ingredient in genius."† How are we to estimate, in the living subject, the *fineness* of the brain lying concealed beneath the non-transparent skull? Here we have another factor to be combined with size and activity. The efficacy will depend on the joint —the combined results of size, activity, power, and fineness.

Nor is this all that needs notice. The actual influence of an organ may differ from its *isolated* power; for the organs act in combination, not independently. There are in the brain antagonist organs, and groups of organs. A powerful organ of Destructiveness may exist, but may not be manifested in conduct, being counteracted by a powerful organ of Benevolence. Combativeness and Destructiveness, though powerful, may be effectually counteracted by powerful Benevolence and Veneration. It is the combined result of the organs in each, with which we have to do. It is

* Syst. of Phren., vol. ii. p. 264. † Ibid. vol. i. p. 164.

the joint and balanced effect of size, activity, power, and fineness that is to determine the actual manifestations of character. Nay, these are not even all the elements that will, on occasion, influence the result—the actual character.

To all these complicated elements, there is yet to be added cultivation. Mr Combe says "If, in each of two individuals, the organs of propensity, sentiment, and intellect are equally balanced, the conduct of one may be *vicious*, and that of another *moral* and *religious*."* Why so? Cultivation causes the difference. Mr Combe himself gives this explanation of the important anomaly. "In such a case," he tells us, "it will be found that the circumstances of the former have been well calculated to rouse and invigorate the animal propensities, and allow the moral sentiments to be dormant, while the circumstances of the other have been directly the reverse. The *native power* may be equal in the propensities and sentiments; but the circumstances have given an acquired ascendency to the class of feelings most strenuously cultivated." † Here, then, we have another important element to be admitted into the calculation of conjoint results. They are the united consequences of size, activity, fineness, and culture in each organ—that culture being determined by circumstances—and also of the balanced action of the entire system of organs, combined with the power of the whole. Here we have four elements of diversity in each organ, then the combined action and counteraction of the entire system, with the amount of power belonging to the whole. Of the four primary elements, one only can be measured,

* Syst. of Phren., vol. i. p. 164. † Ibid. pp. 164, 165.

and that but by estimate, viz. the size of the organ. Its activity must be *estimated by the intellect.* Its degree of fineness is, at least in the living subject, an impenetrable secret. Its culture would need to be told the phrenologist, before he can give a correct development of character; which, to be just, should include an estimate of all the actions, combined and opposite, of the entire system of phrenological organs, modified by its general power.

We have not done yet with the elements requisite for the forming of a phrenological judgment. We must attend to the constitutional qualities of the brain. Mr Combe says, "There are some constitutional qualities which can be judged of only by knowing the qualities of the stock or race from which the individual under examination is descended."* Here we have a new and perplexing circumstance to consider and estimate. There are *two* parents. The constitutional qualities of each parent must be known, estimated, compared, and balanced. Even remote ancestors may introduce disturbance into the result, by infusing into those of the race their own peculiar qualities.

Surely we have done now with the elements which we need to combine in forming our estimate! Not yet. There are other perplexities to be removed before correct phrenological conclusions can be drawn. Other particulars, yet unnoticed, demand attention. There is the *health* of the brain, which may materially modify its action. "In cases of disease," Mr Combe tells us, "*great size may be present, and very imperfect manifestations appear;* or the brain may be attacked with diseases, such as inflammation, or any of

* System of Phrenology, vol. i. p. 49.

those particular affections whose nature is unknown, but to which the name of Mania is given in nosology, and which greatly exalt its action; and then *very forcible manifestations may proceed from a brain comparatively small, &c.*"* In these cases of ill health great size may be present, yet there may be only very imperfect manifestations; or, on the contrary, very forcible manifestations may proceed from a brain comparatively small. Here is a new obstacle. How is the inquirer to surmount it? Mr Combe tells us, "The phrenologist ascertains, by previous inquiry, that the brain is in a state of health. If it is not, he makes the necessary limitations in his conclusions."† Now, as there may be incipient, unsuspected disease in the brain, this particular adds considerably to the difficulties which must be encountered by the phrenologist in forming an estimate of the character from his observations.

All these particulars united, must present great difficulty in the mode of *applying* the principles of phrenology to practice, even *were these principles ever so clearly ascertained.* We have said nothing of the anatomical difficulties, arising either from the want of conformity between the interior and exterior of the skull, from the existence of what is called the frontal sinus, which often presents a serious obstacle in the way of the investigator, or from the anomalous changes in the thickness of the skull, which are occasioned by disease, and by advancing age. These must throw additional impediments in the way of the inquirer; but upon them we shall not dilate.

Enough has been said to show that the de-

* System of Phrenology, vol. i. pp. 54, 55. † Ibid.

ductions of the phrenologist should at present be regarded rather as probable conjectures, than as well established conclusions. They ought to be given forth with modesty, and received with caution. The bold and reckless confidence which would substitute them in the room of the clear directions found in the page of Revelation, is alike unsafe and unphilosophical.

CHAPTER XV.

ON THE USE OF SCIENCE AS A GUIDE IN THE INTERPRETATION OF SCRIPTURE.

In Scripture, some things are revealed clearly,—others are indicated obscurely,—and others are mentioned indirectly and incidentally.

Regarding the first class of Scripture announcements, there is no need that the interpreter of divine revelation should borrow the lamp of secular science to aid his inquiries. The light he already has, is much more bright and steady than any that science can supply. Here, there is no need that we follow the guidance of Scripture with faltering steps. Our path is plain; it is vividly illuminated. "The wayfaring men, though fools, shall not err therein." To use the language of Bishop Taylor, in a passage which Mr Combe has approvingly quoted in reference to the interpretation of Scripture (Const. of Man, p. 92):—"*All things* NECESSARY *to faith and good manners* ARE *preserved from alteration and corruption*, because they are of things necessary, and they could not be necessary unless they were delivered to us; God, in his goodness and his justice, having obliged himself to preserve that which he hath bound us to observe and keep."

But in the interpreting of the second class of Scripture announcements—those which respect things intimated obscurely—the biblical inter-

preter need not blush to borrow light from any *exact* science, whether mathematical, physical, physiological, or mental. These intimations do not relate to objects within the peculiar domain of divine revelation, but to objects bearing a *correlation* to those to which divine revelation directly refers. In reference to these, let the philosopher and the theologian amicably meet, and agreeably settle their respective claims.

The third class of Scripture intimations, viz. the indirect and incidental, being generally given in language merely popular, should not be too rigidly interpreted by the theologian. These respect matters which the Bible was not designed to teach. Regarding them it would be folly to refuse the aid of science, when engaged in the work of interpretating language that may, in itself, be obscure or equivocal.

It is worthy of remark, however, that many of the obscure and indirect scriptural intimations to which sceptics once strongly objected, have, by the ever-growing light, cast by increasing scientific and historical information, been shown to be minutely and accurately true. Travellers in oriental regions have discovered numerous illustrations and confirmations of the truthful manner in which the sacred writers have described customs, usages, scenes, and occurrences, which once supplied superficial cavillers with imagined difficulties which they delighted to urge against revelation,—difficulties which their own ignorance alone swelled into appalling magnitude. The recently excavated ruins of Nineveh,—the desolate dwellings of Idumea,—the hieroglyphic records of ancient Egypt, which modern philo-

logists have at last learned to decipher,—the still unfaded monumental inscriptions, and well preserved sculptures on the tombs of the Pharaohs —have furnished Christians, with new and unthought-of means, by which the incidental intimations of Scripture are clearly elucidated and strongly confirmed.

Mr Combe has, in various instances, passed across the line which the caution and modesty of true science have drawn to divide the provinces of revelation and philosophy; but no objection can be reasonably made to the following sentence. "In the remarks offered in the present chapter, I do not depreciate the importance of the Bible, I only very humbly endeavour to vindicate the study of the Creator's will, in his own works as well as in his word,—to show that the human mind needs illumination from both to direct our conduct towards virtue, and to prove that without knowledge of the former we may grievously misunderstand the meaning of the latter."*

At the same time that we cordially concur in the sentiments thus well expressed, we must distinctly declare that this statement can only apply to points on which Scripture casts an indirect and feeble, while science casts on them a direct and powerful, light. Doctrines clearly announced, and duties plainly enjoined in the oracles of God, demand immediate attention. We must neither doubt the former, nor neglect the latter. Men have erred, not in humbly following, but in presumptuously or thoughtfully disregarding the clear intimations of sacred writ.

If any professors of religion forbid the popular

* Constitution of Man, p. 93.

study of Scripture, or supersede its plain dictates, either that they may submit themselves to any authority merely human, or that they may receive or reject at pleasure what Scripture distinctly teaches,—their errors and their mutual disagreements are not to be attributed to their believing the Bible, but, on the contrary, to their rendering to it only a doubtful and imperfect homage. The cure in such cases is simple and efficacious,—it consists in paying more attention to the Bible, not in leaving it to follow the guidance of phrenology. Let all religious bodies receive what the Scriptures *plainly* teach both as to doctrine and duty; and let them, in matters which the Scriptures do not plainly teach, leave each other to exercise the inalienable right of private judgment. When this is generally done, very few disputes will be left to distract the minds and impede the usefulness of professing Christians.

Meanwhile, let each individual believer in the Bible study it with humble diligence. Let him prove all things, and hold fast that which is good. Let him welcome truth, come from what quarter it may. Let him not reject the pale light which glimmers over the decayed remains of former sentient existences, now entombed in the petrified or the mouldering strata that encrust the world. Let him not despise the uncertain intimations of human character, read by the prying phrenologist from the convolutions of the brain and the configuration of the skull. While he does not overvalue these intimations, nor put them in competition with the more sure word of prophecy, let him not despise them. Let him, so far as his ability and opportunities admit,

study *all* the laws of nature. So far as he can do so, and at the same time observe the laws of piety and virtue, let him place himself in harmony with all the ascertained physical and organic laws. Let him regard these as useful, though obscure and subordinate intimations of his adorable Creator's will. In this manner he may secure continual improvement and happiness. All things, thus studied, will lead him to what Mr Combe, echoing the voice of Scripture, rightly denominates "the great objects of his existence, viz. 'obedience to God, and love to his fellow-men.'" *

* Constitution of Man, p. 2.

FINIS.

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